

FIG. 1

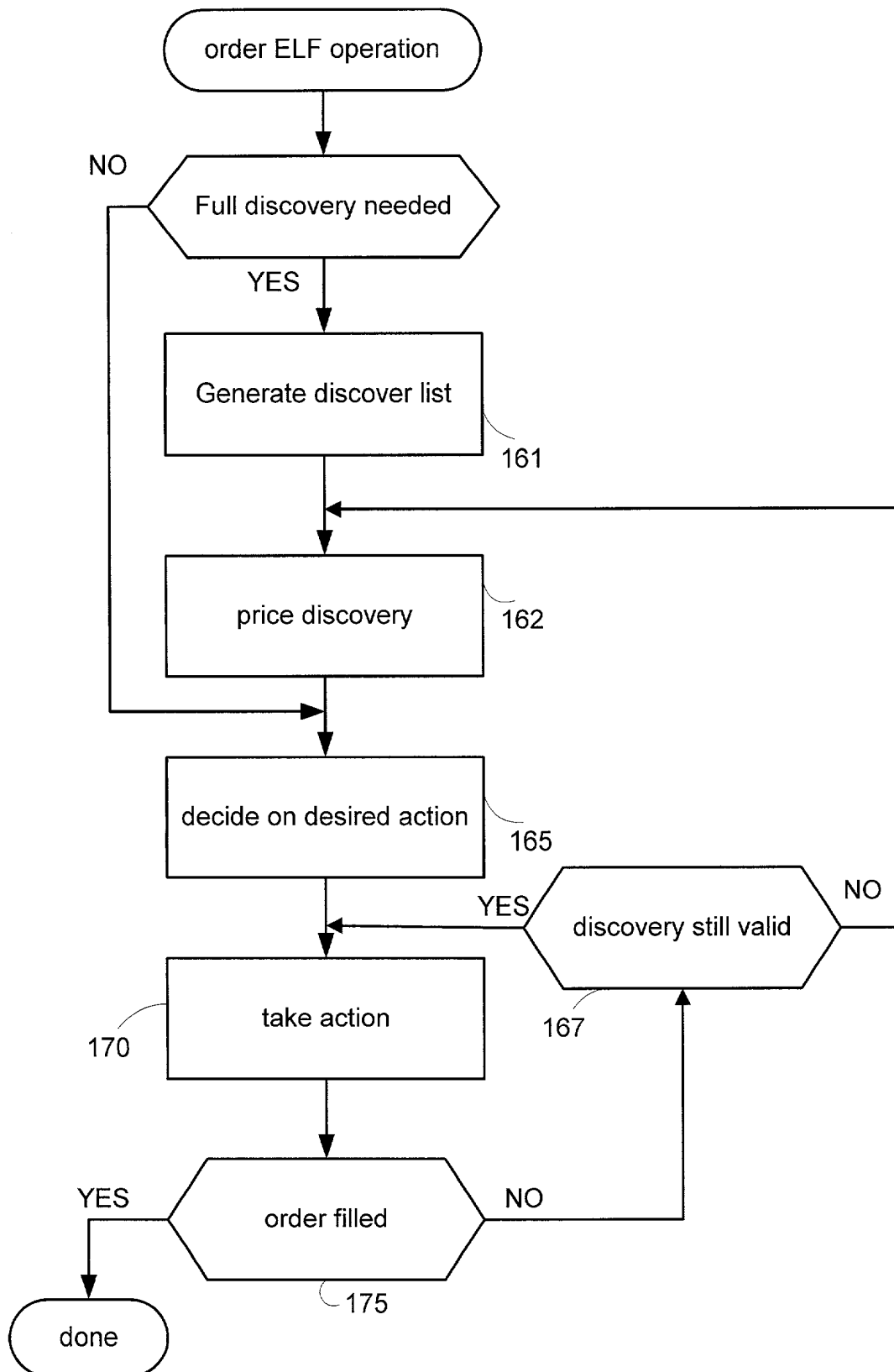


FIG. 2

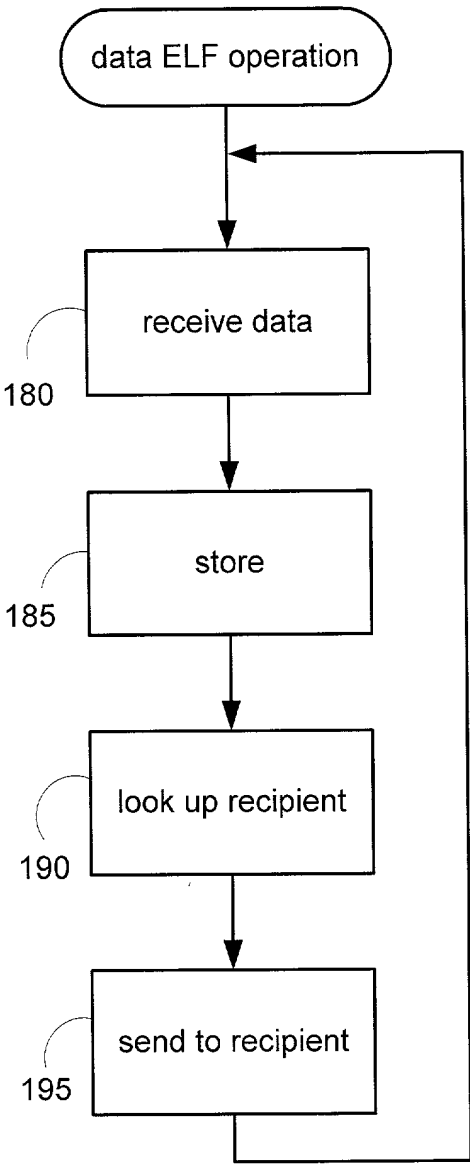


FIG. 3

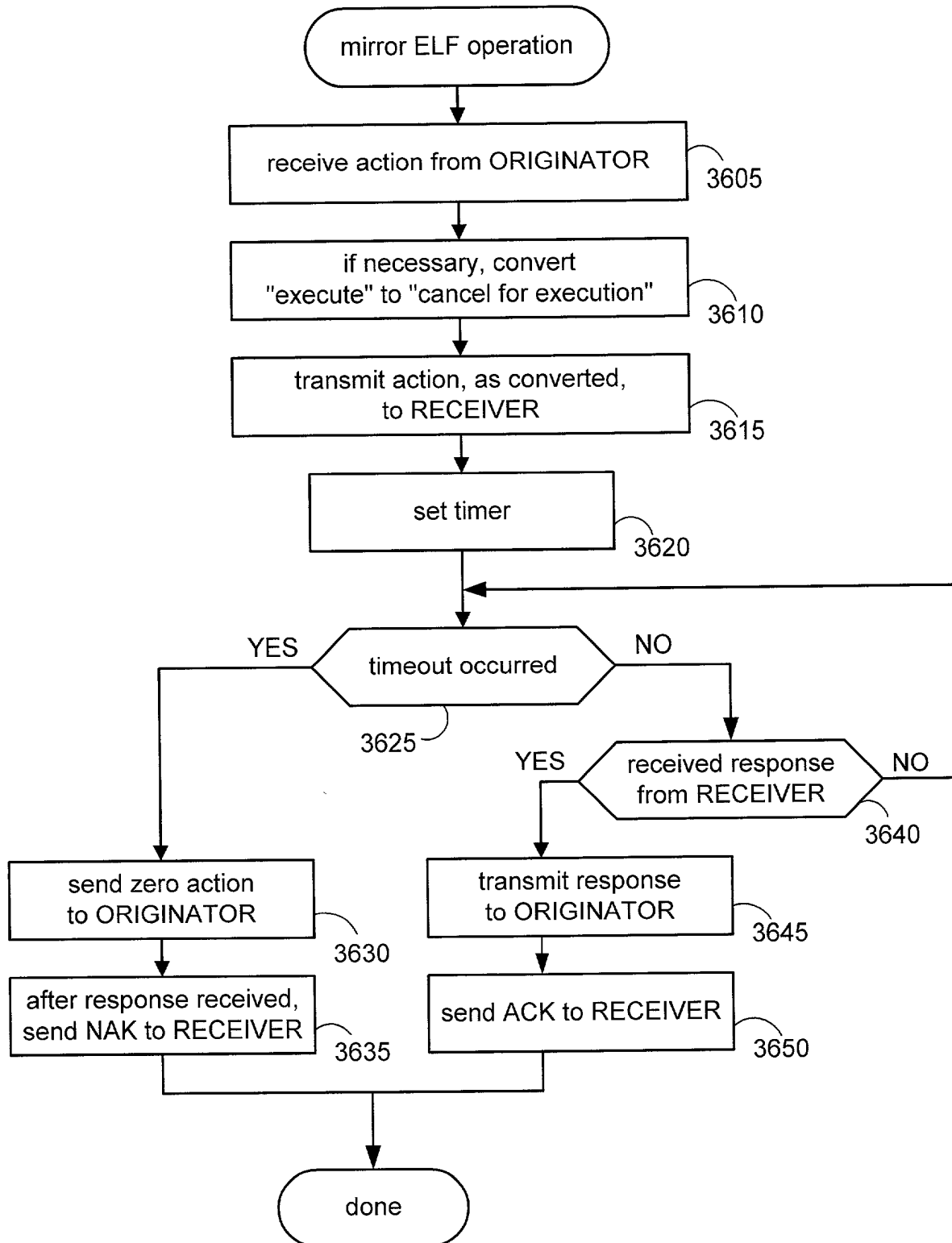


FIG. 4

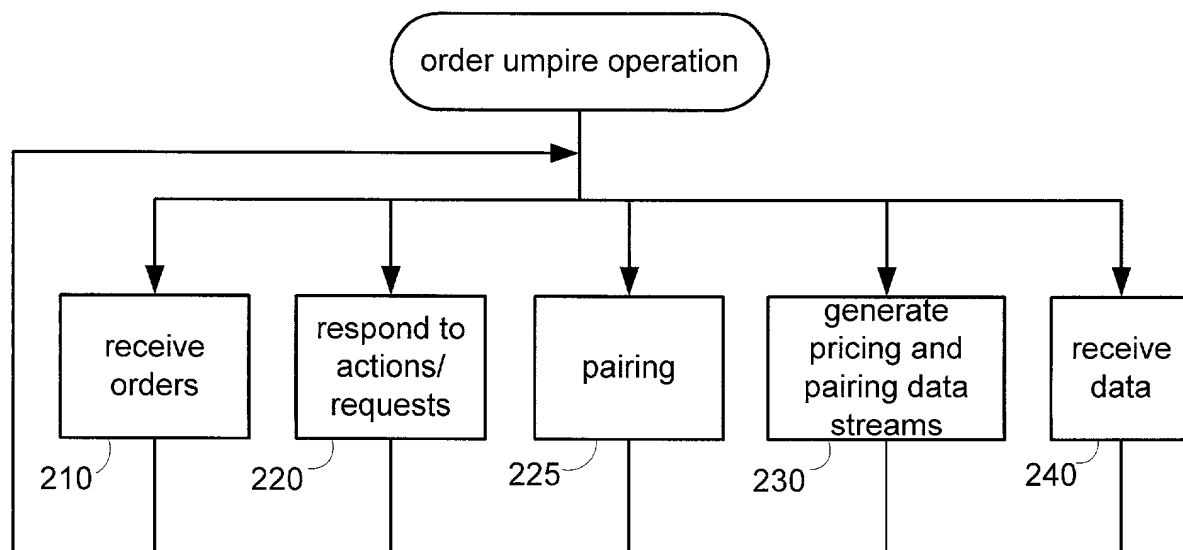


FIG. 5

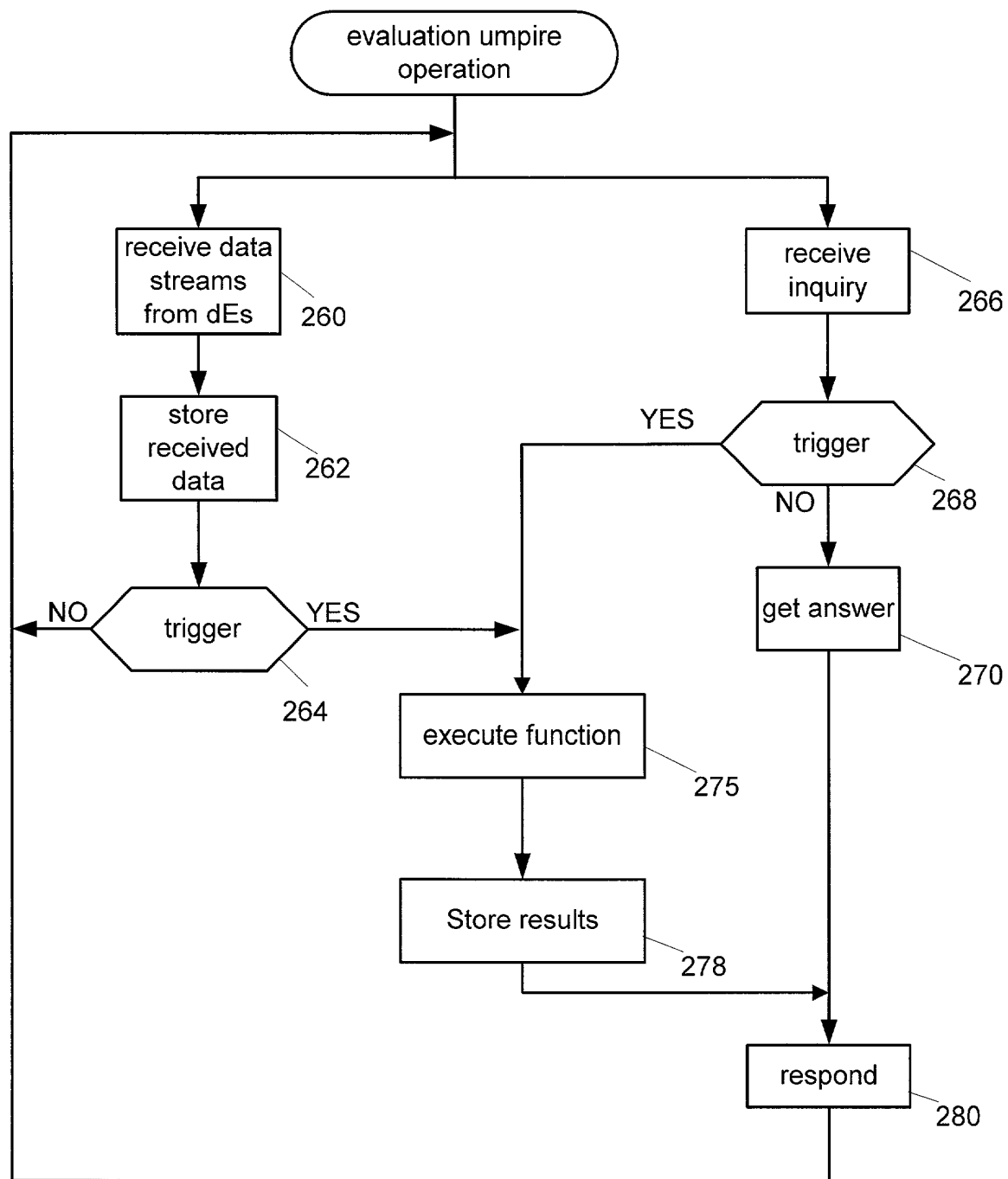


FIG. 6

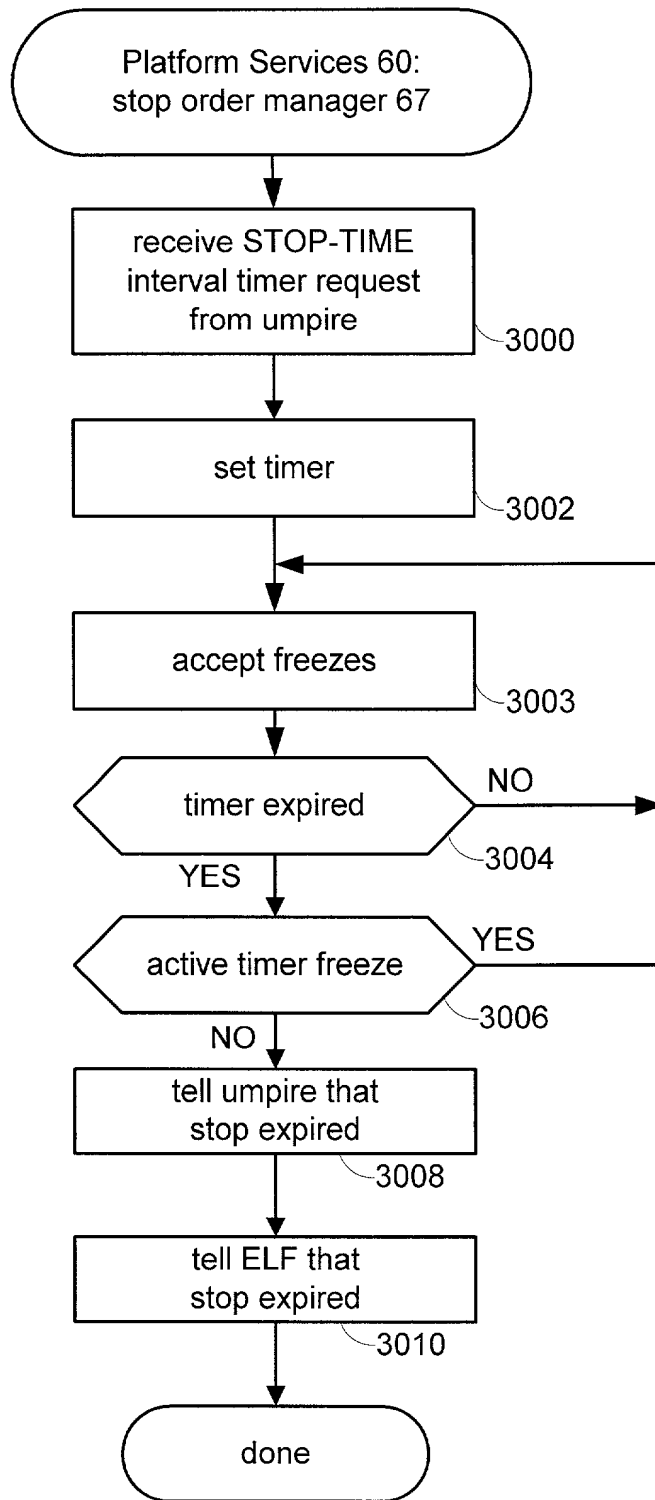


FIG. 7

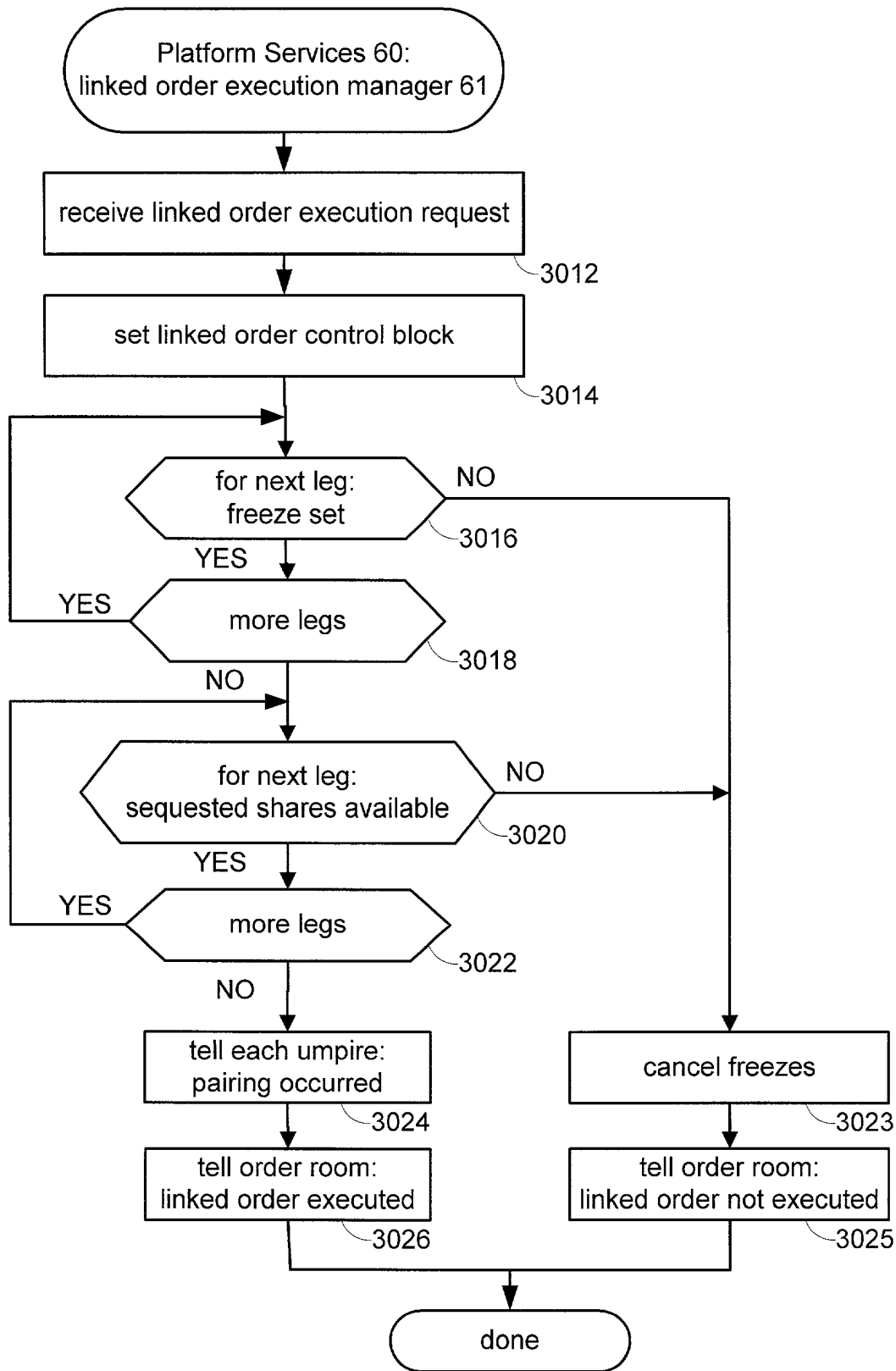


FIG. 8



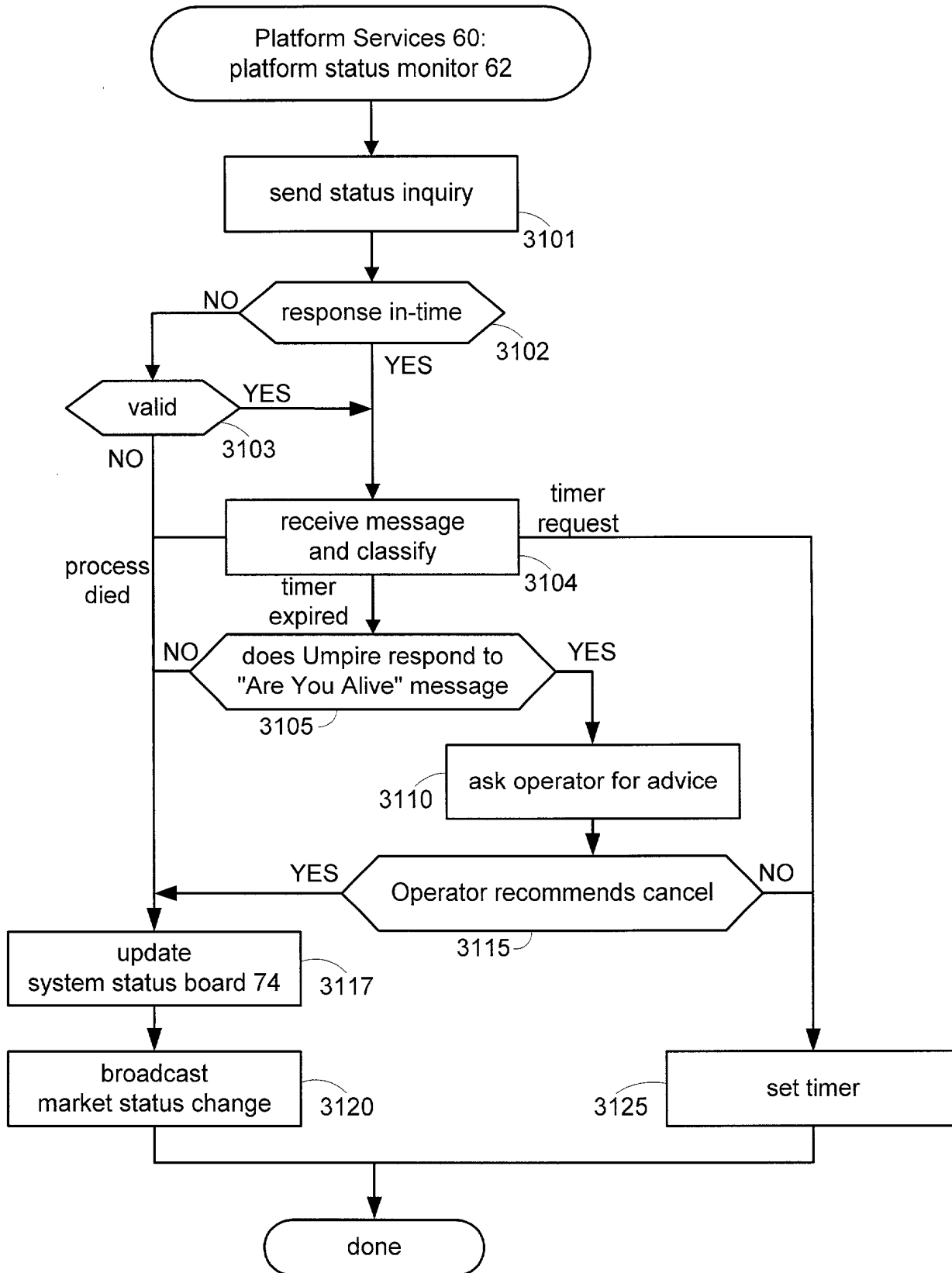


FIG. 9

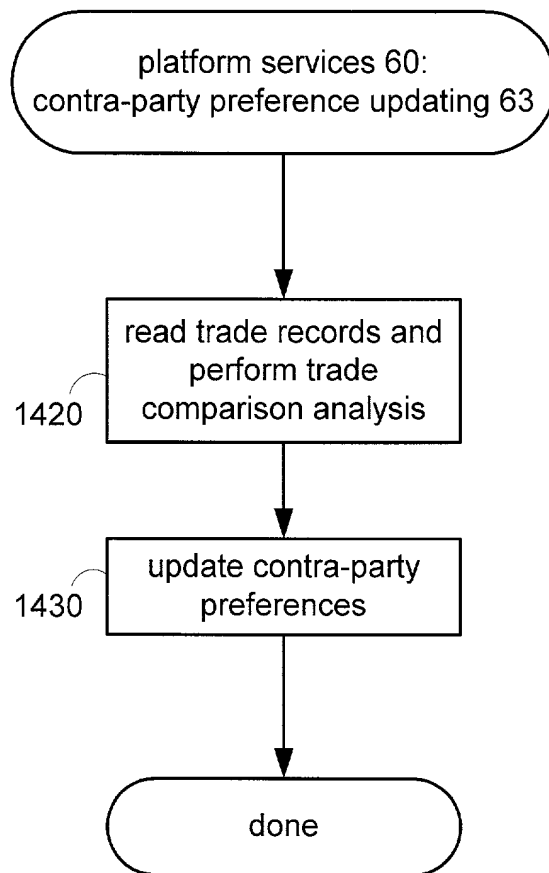


FIG. 10

74

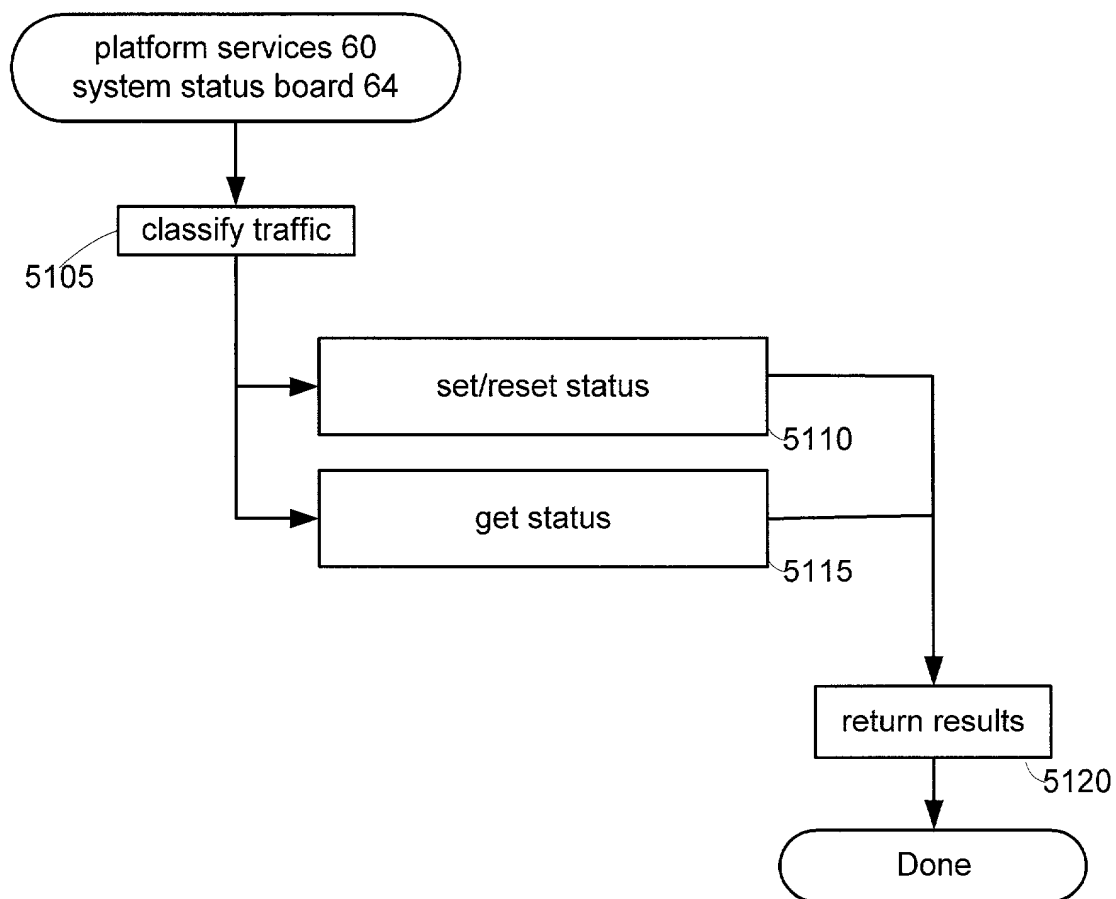


FIG. 12

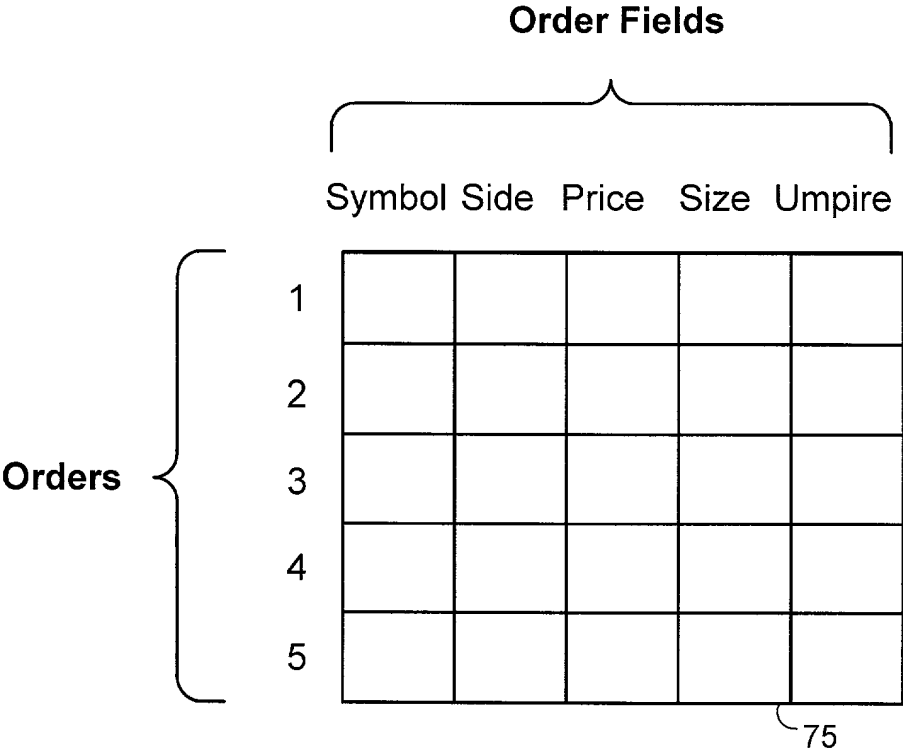
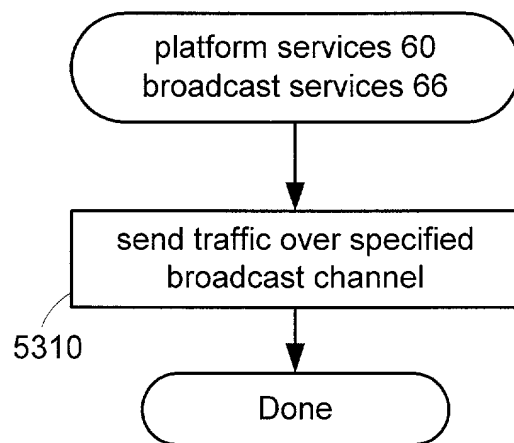
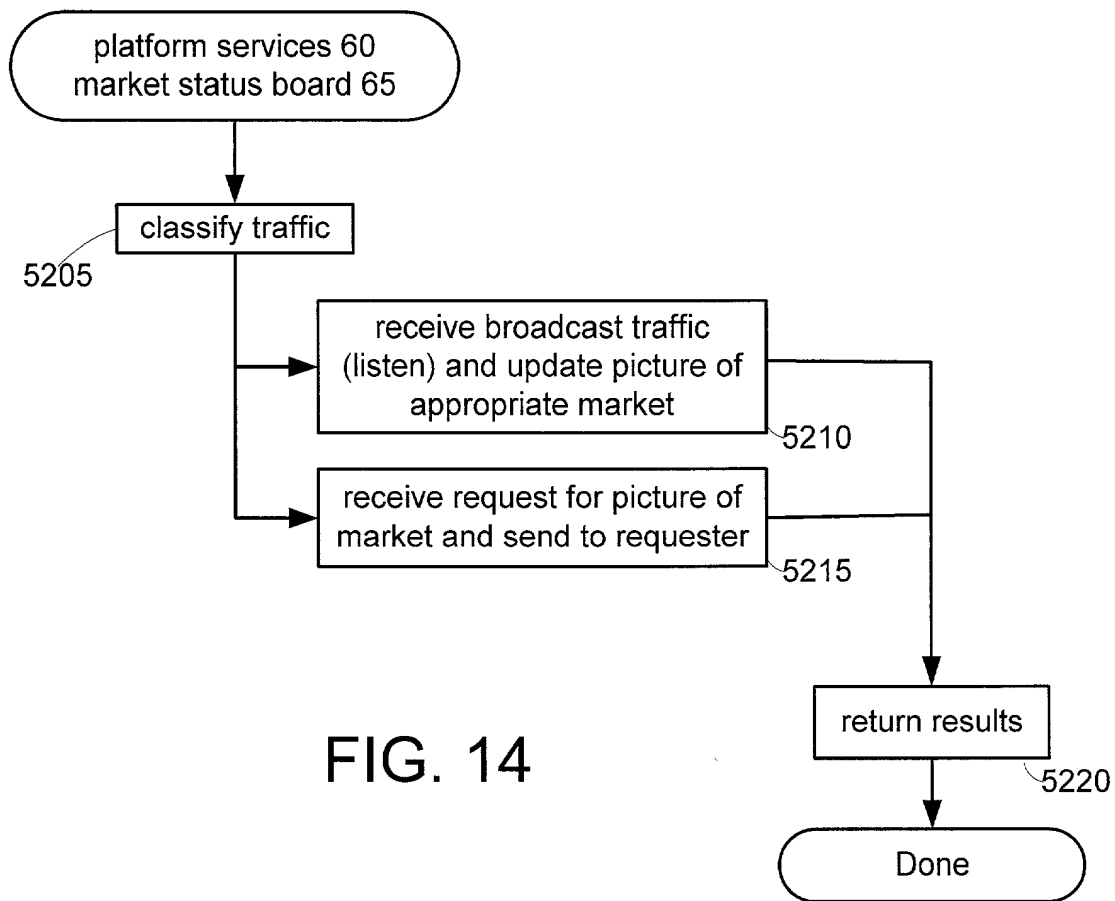


FIG. 13



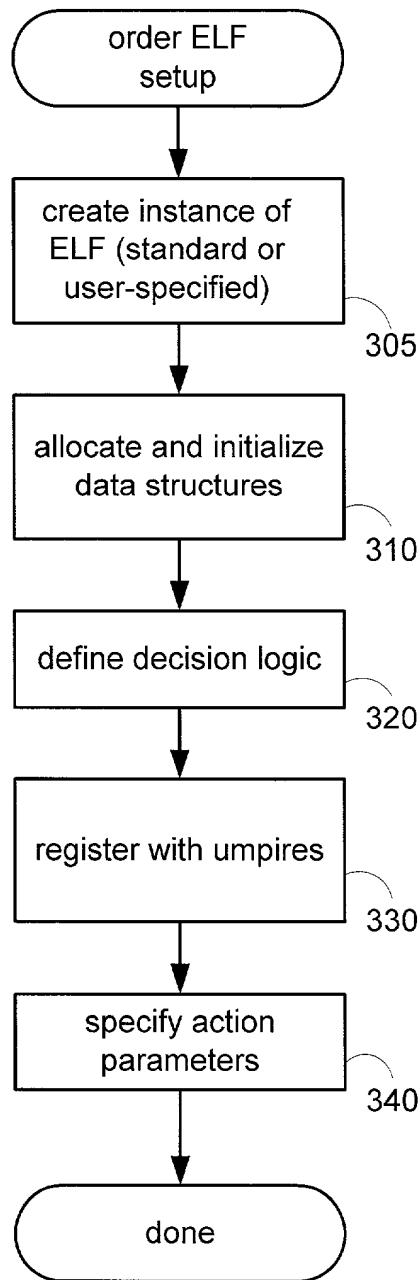


FIG. 16

110

sections	S-1	S-2	S-3		S-s
holding tanks	H-1	H-2	H-3		H-h
orders waiting in holding tanks	order-1				
	order-2				
	order-n				

FIG. 17

condition cells					action cells				

FIG. 18



name of symbol	type	attributes	default value	value

150

FIG. 19

umpire 342
umpire 30
.
.
.
umpire 154

130

FIG. 20

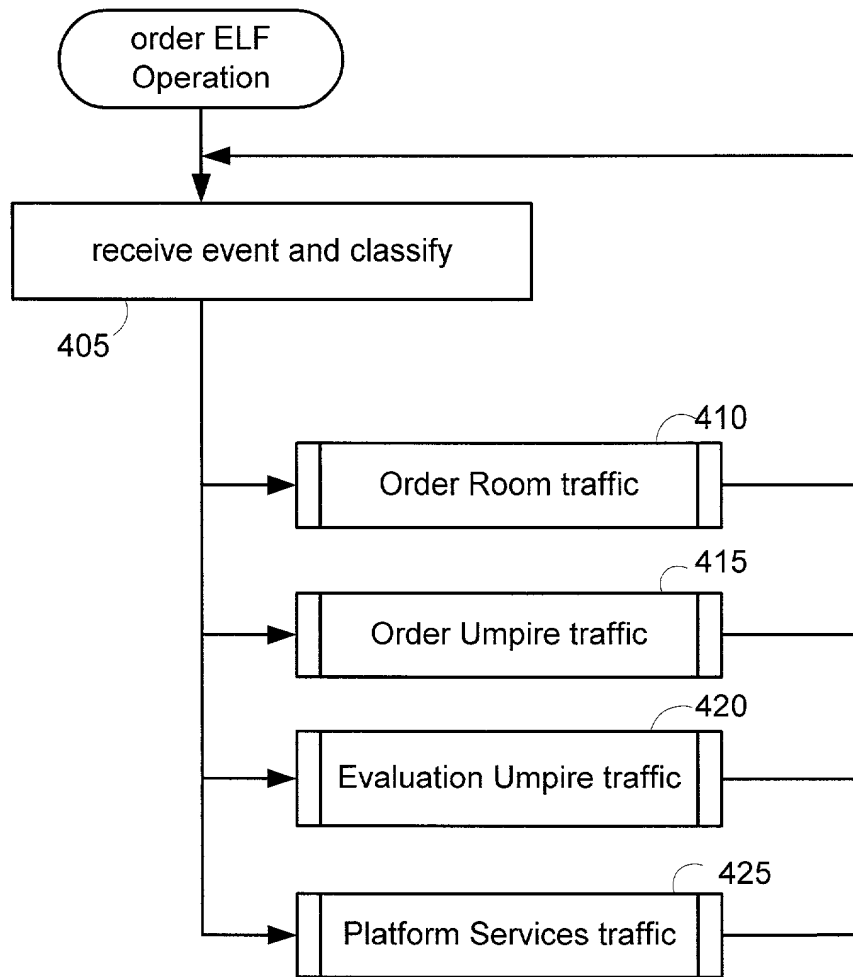


FIG. 21

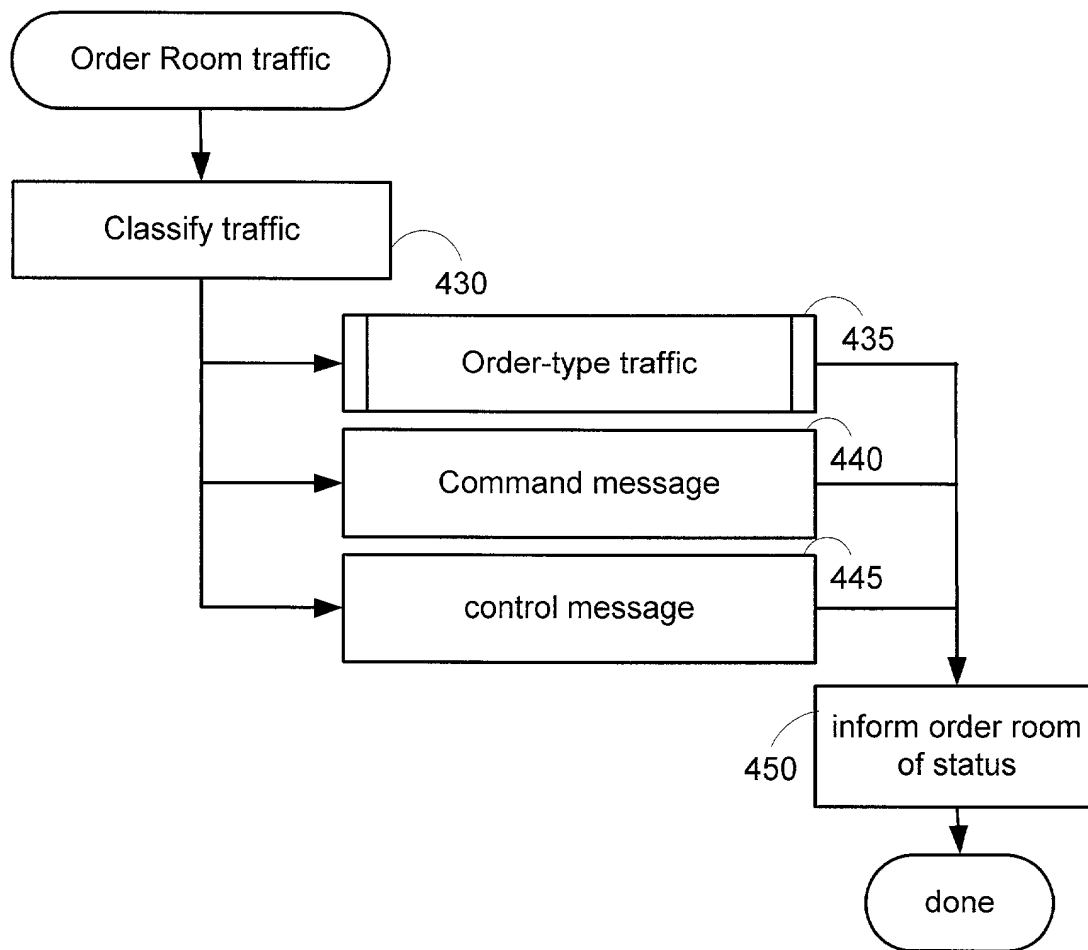


FIG. 22

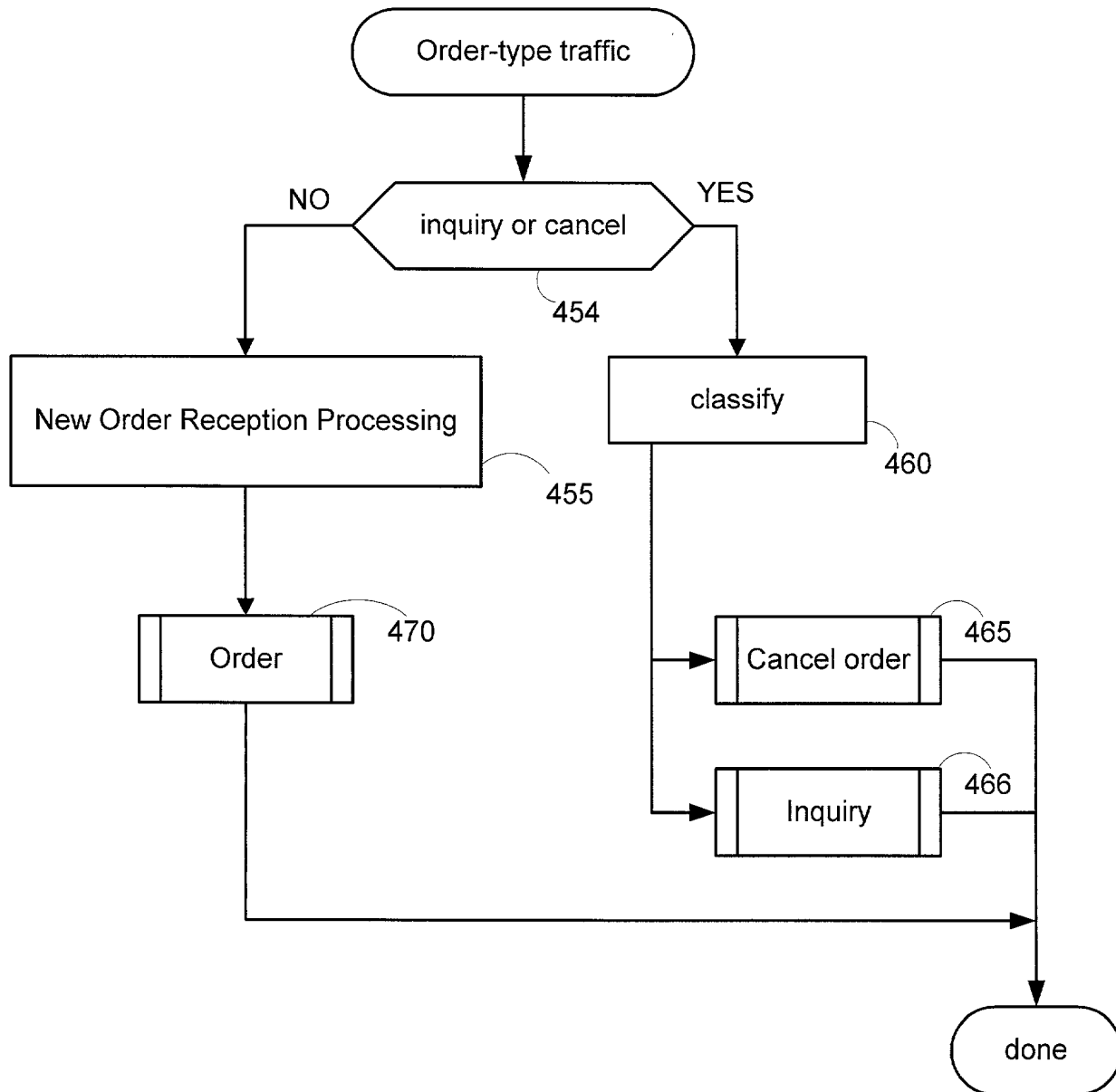


FIG. 23

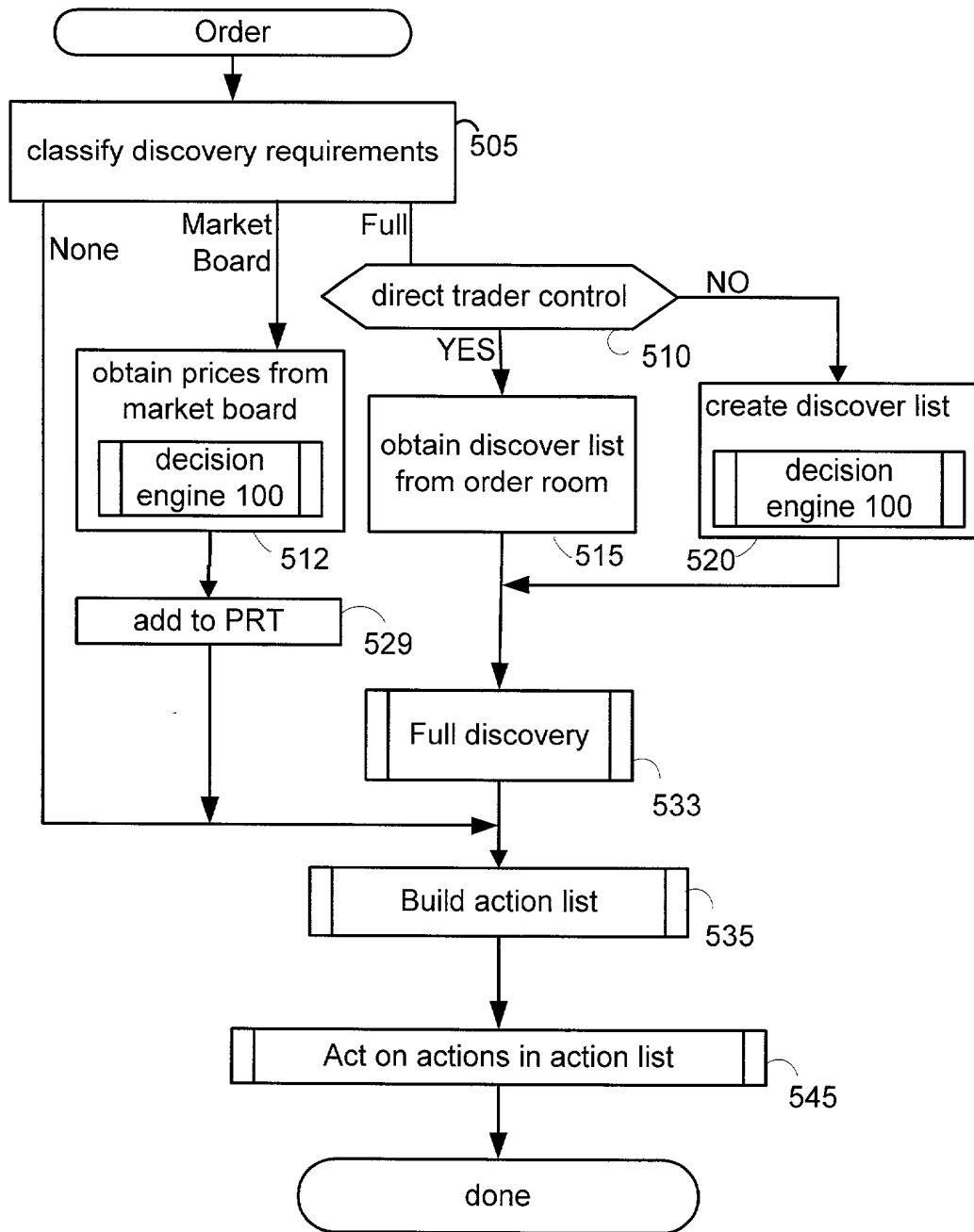


FIG. 24

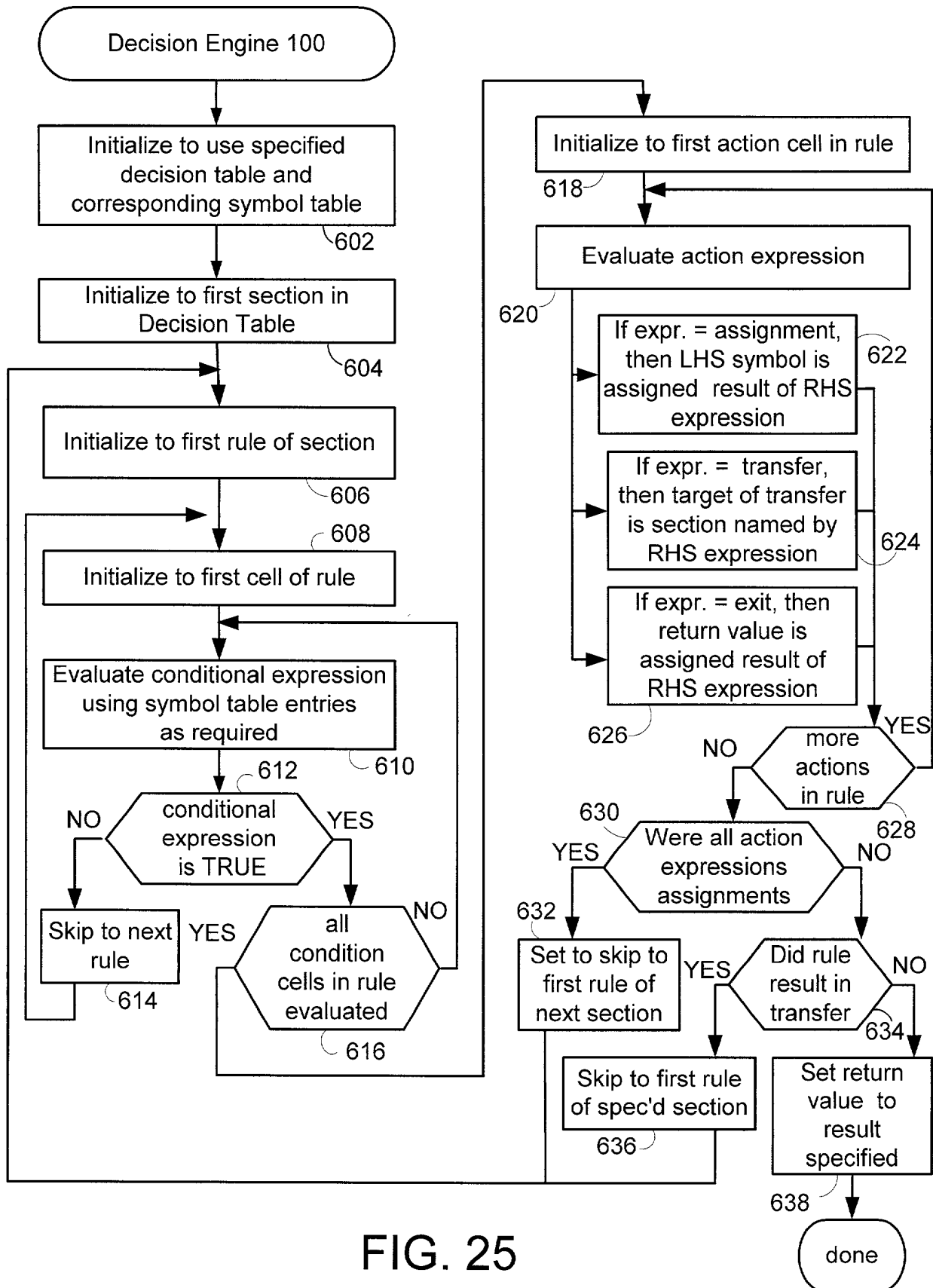


FIG. 25

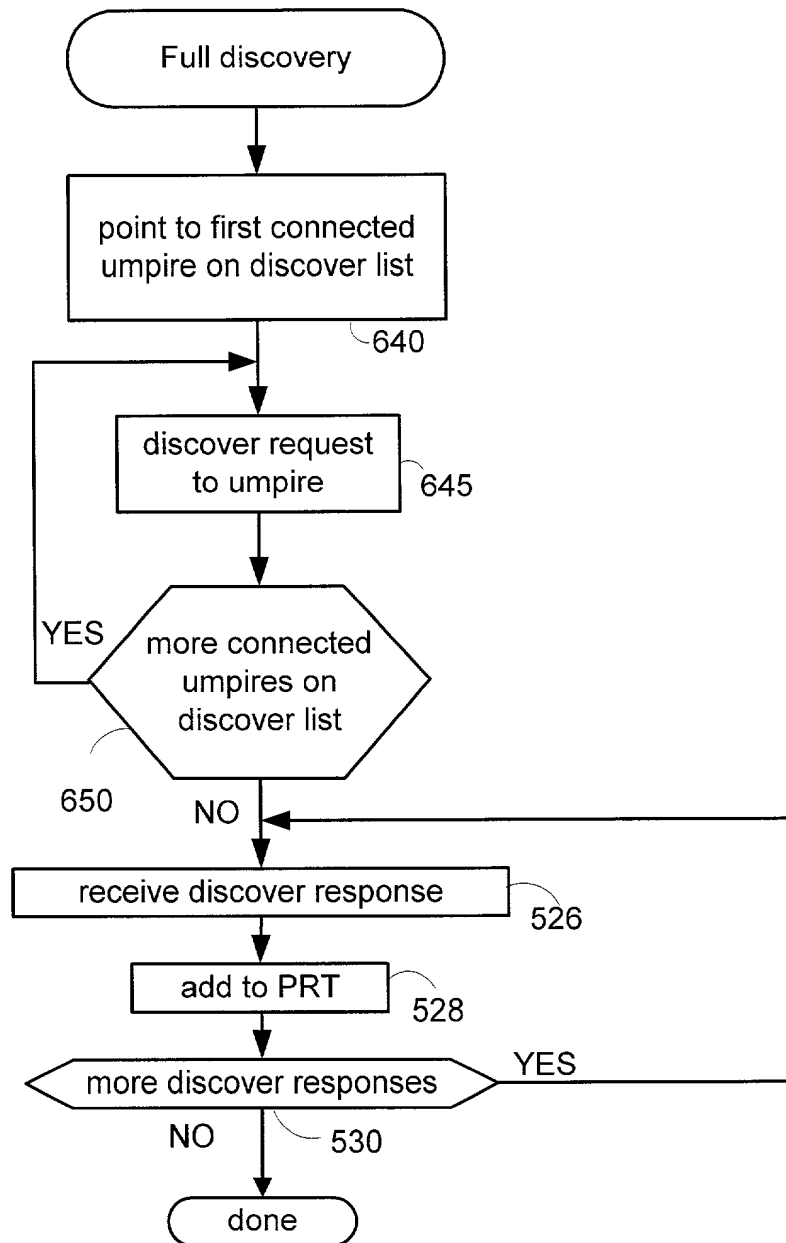


FIG. 26

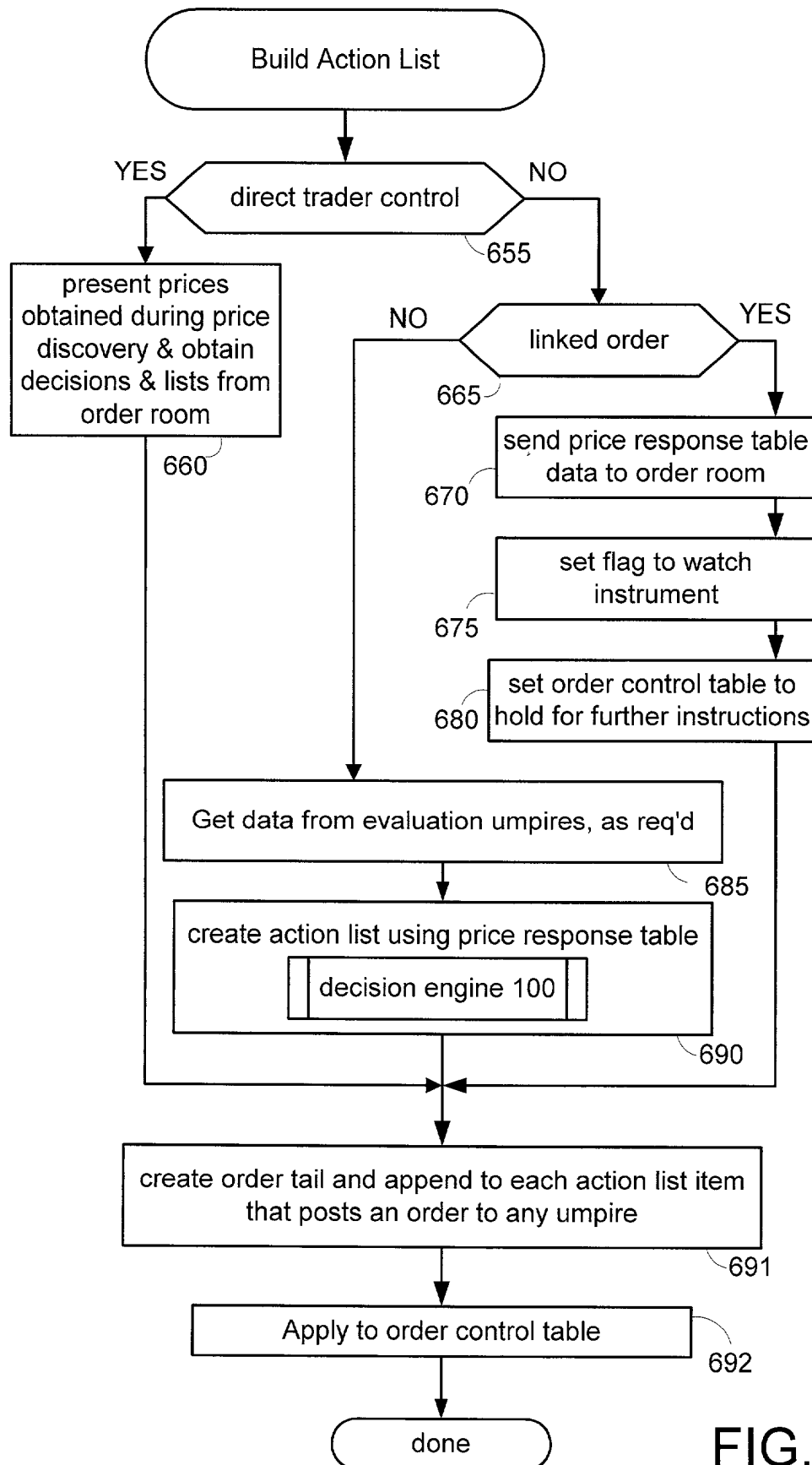


FIG. 27



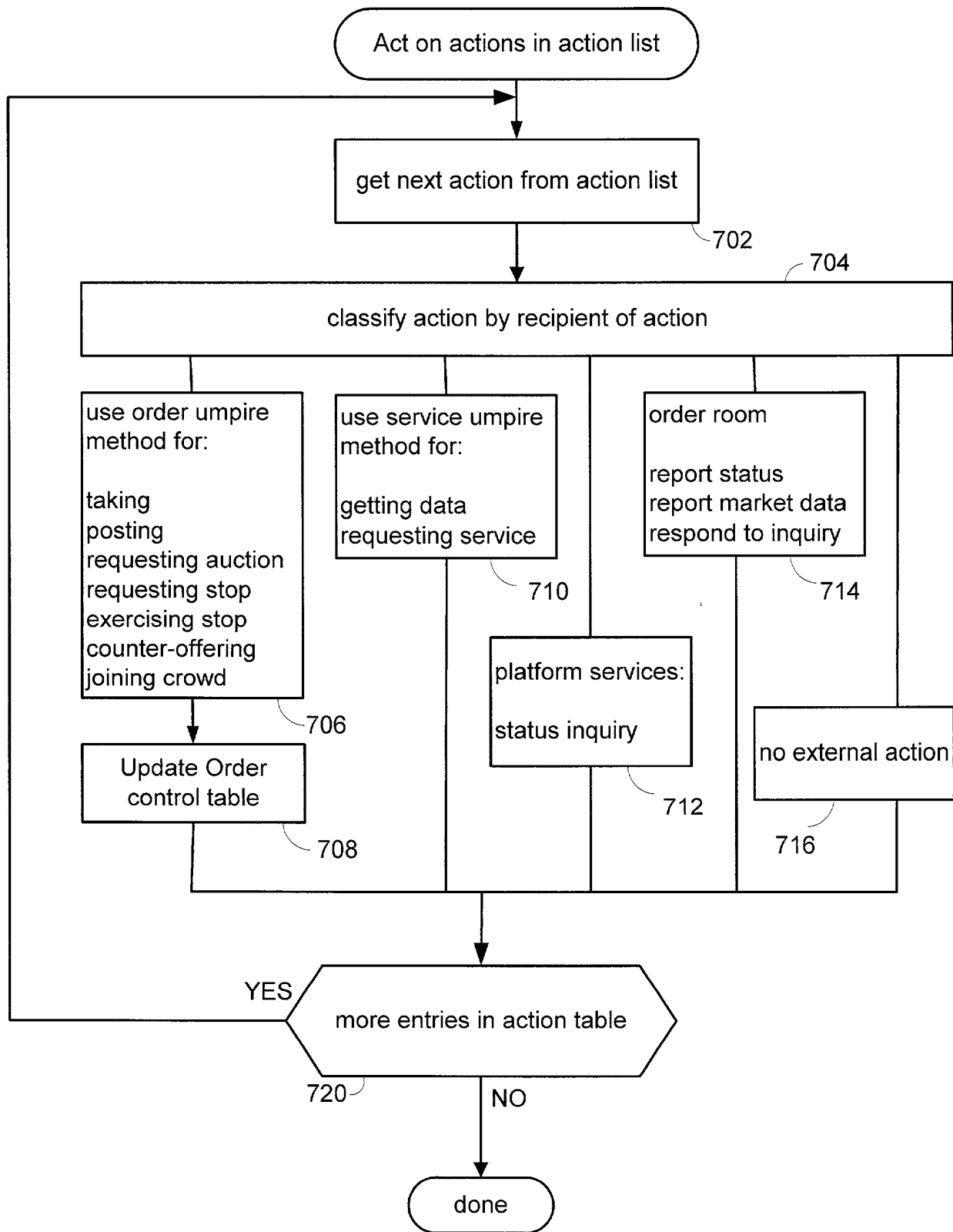


FIG. 28

FIG. 29A

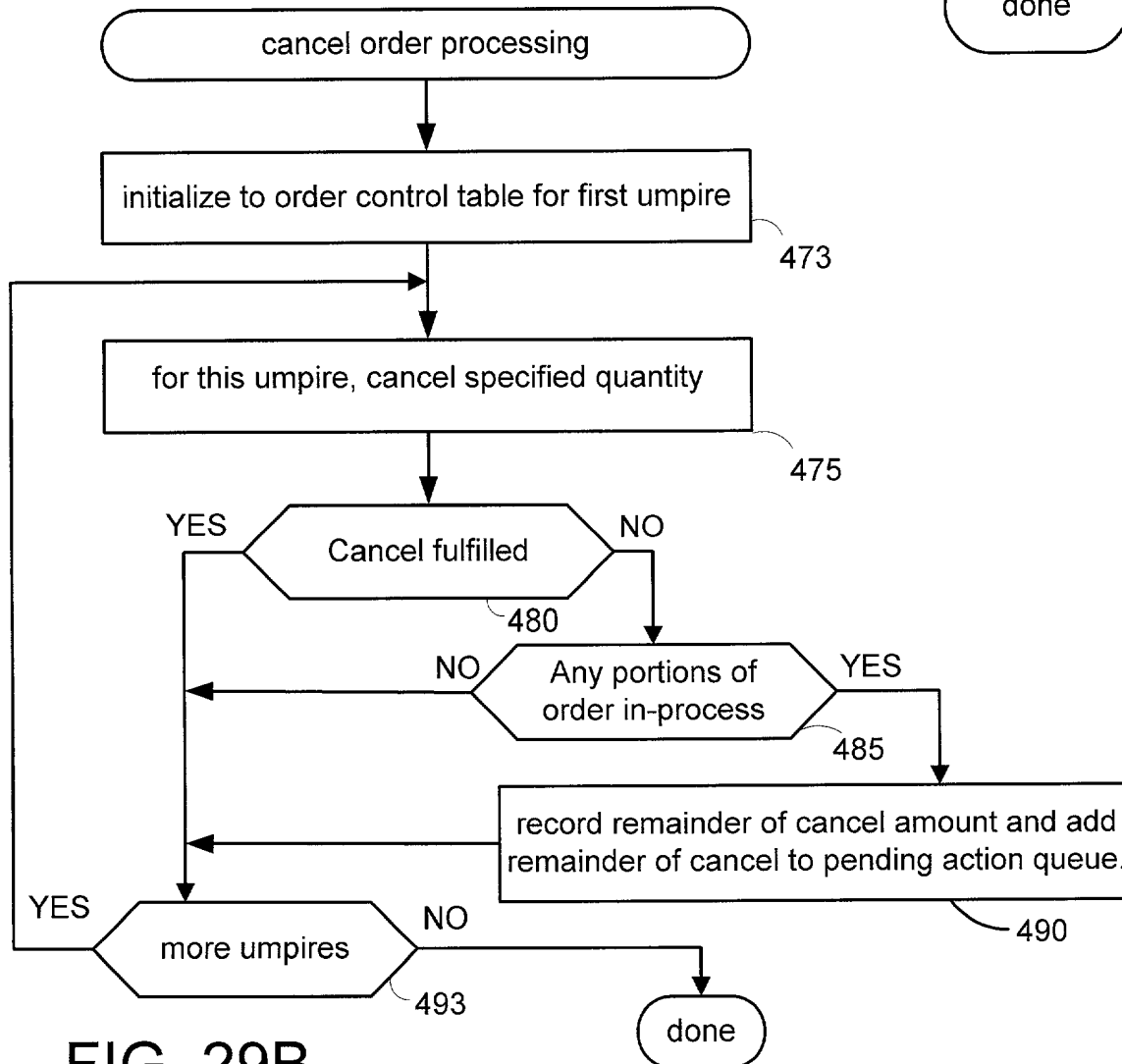
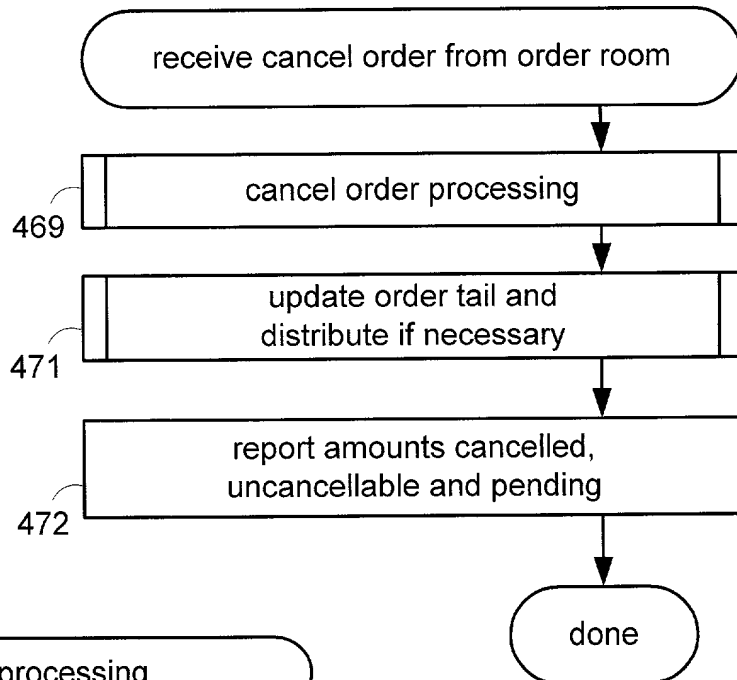


FIG. 29B

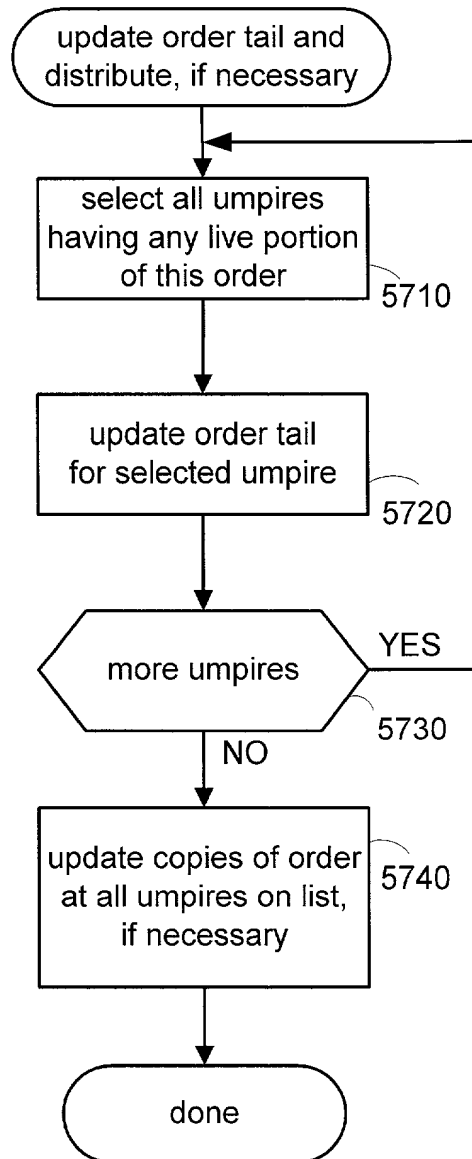


FIG. 30

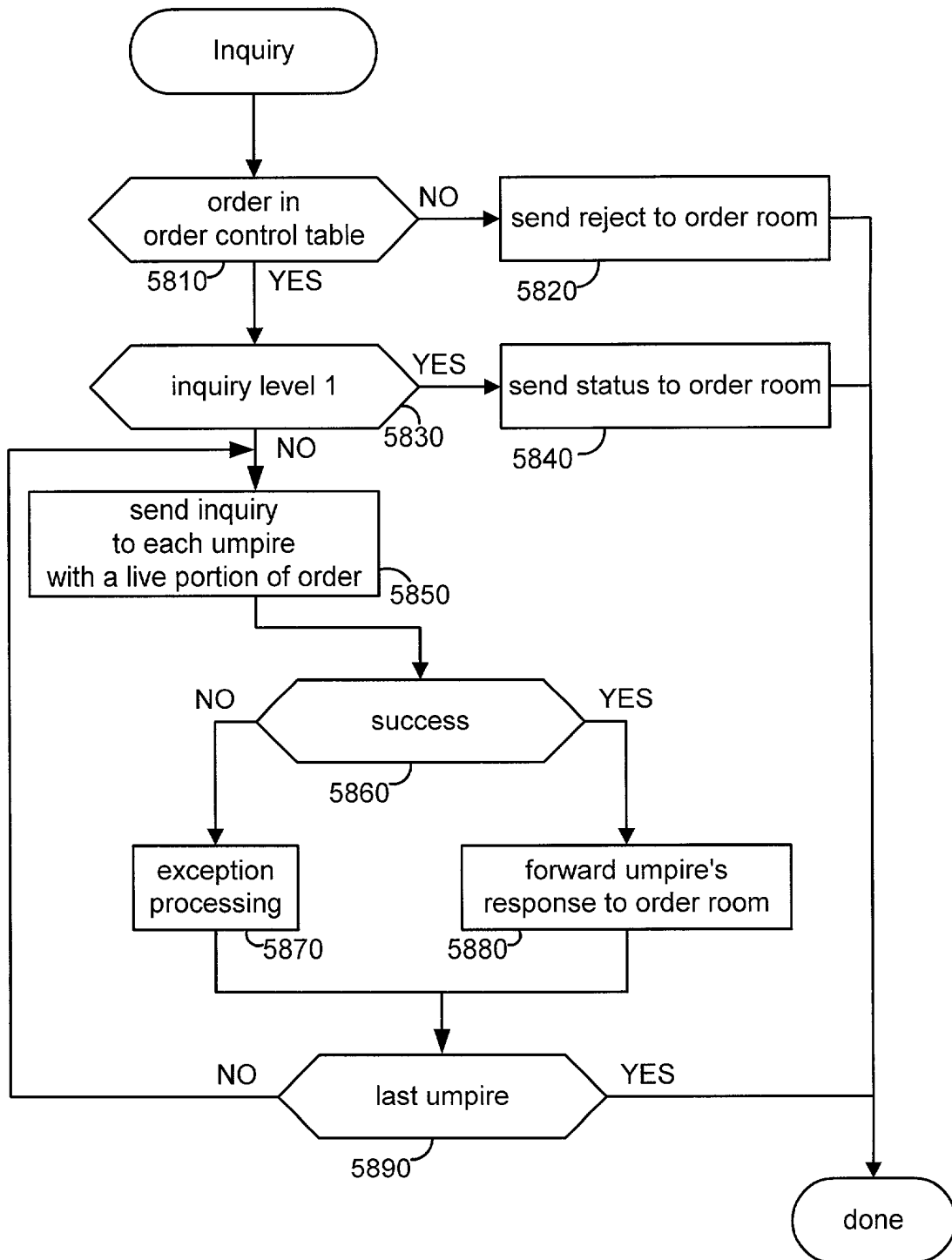


FIG. 31

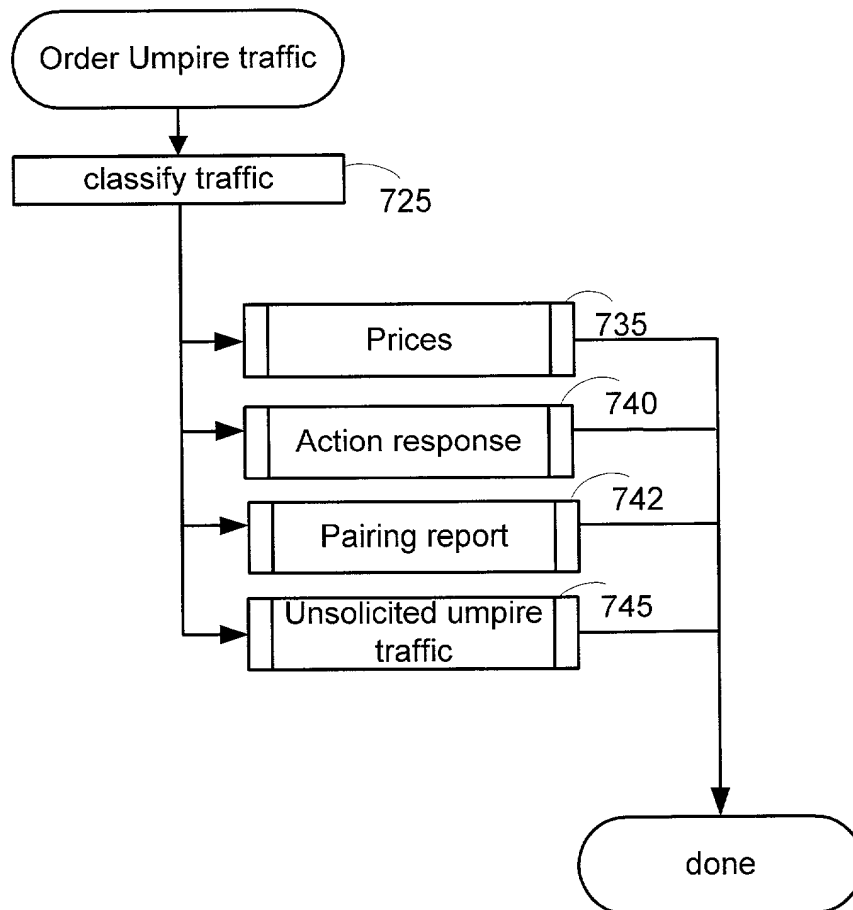


FIG. 32

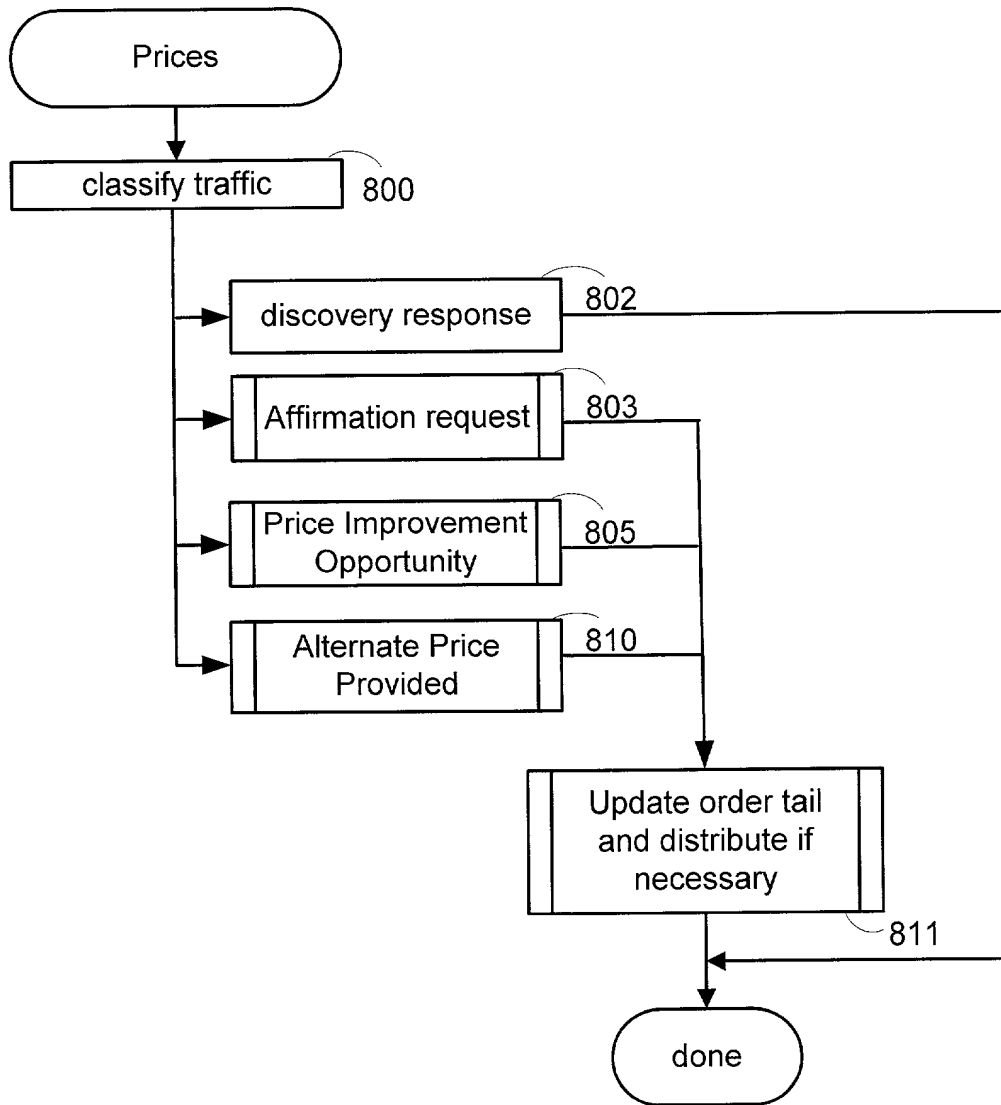


FIG. 33

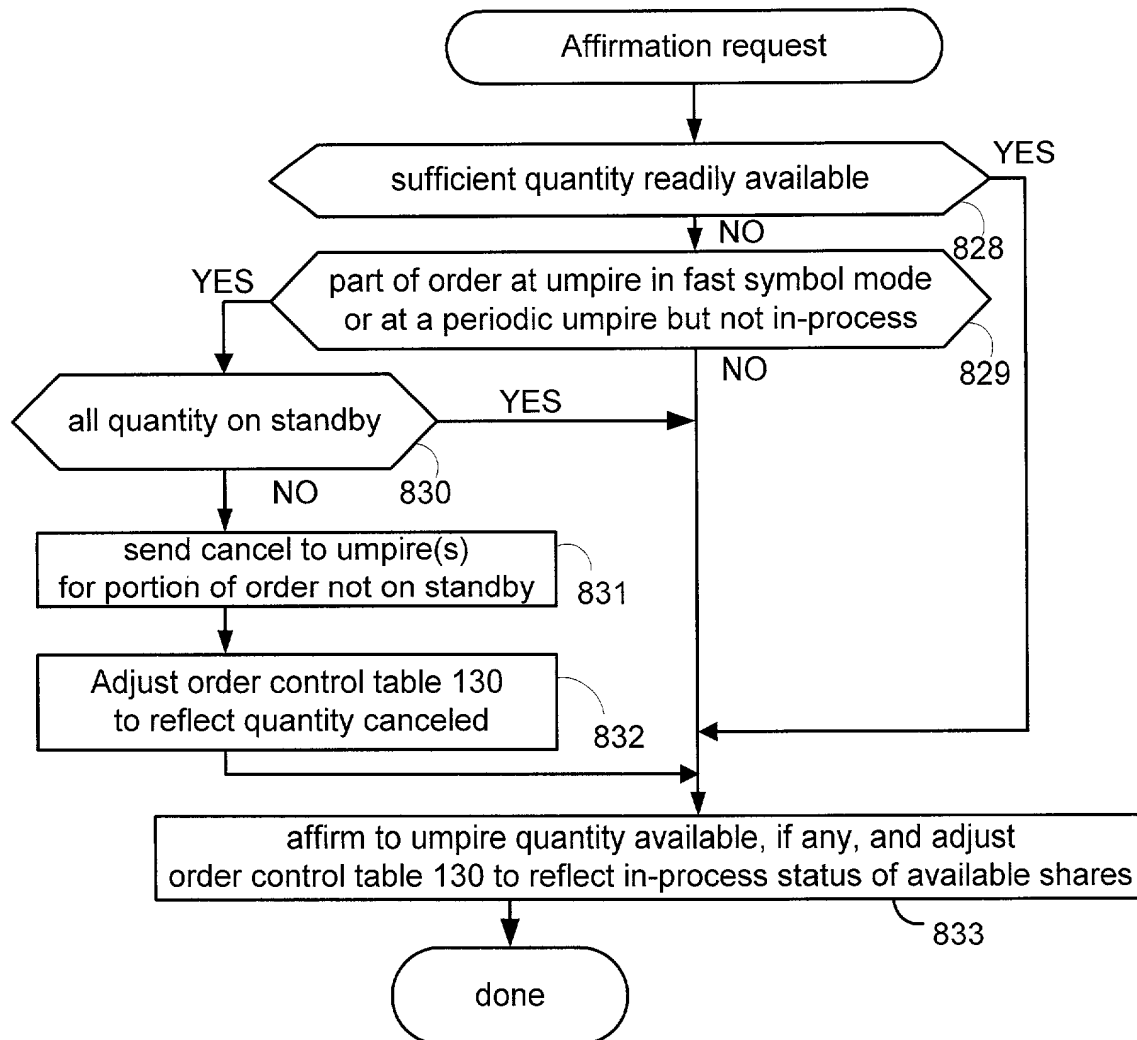


FIG. 34

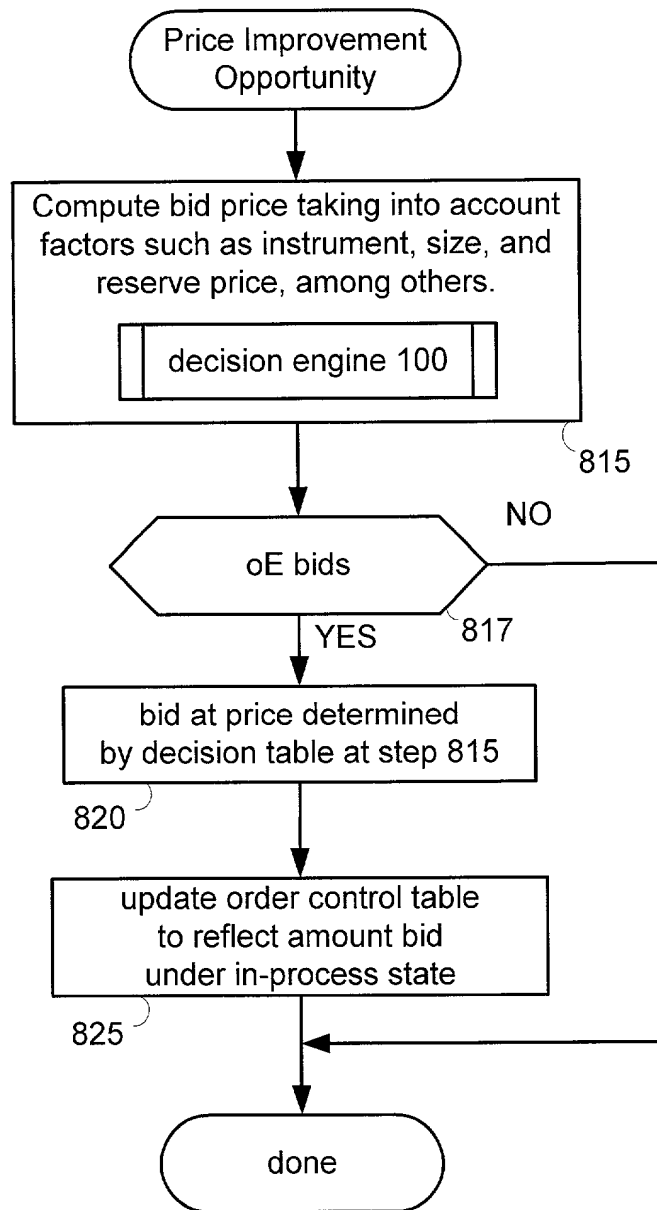


FIG. 35



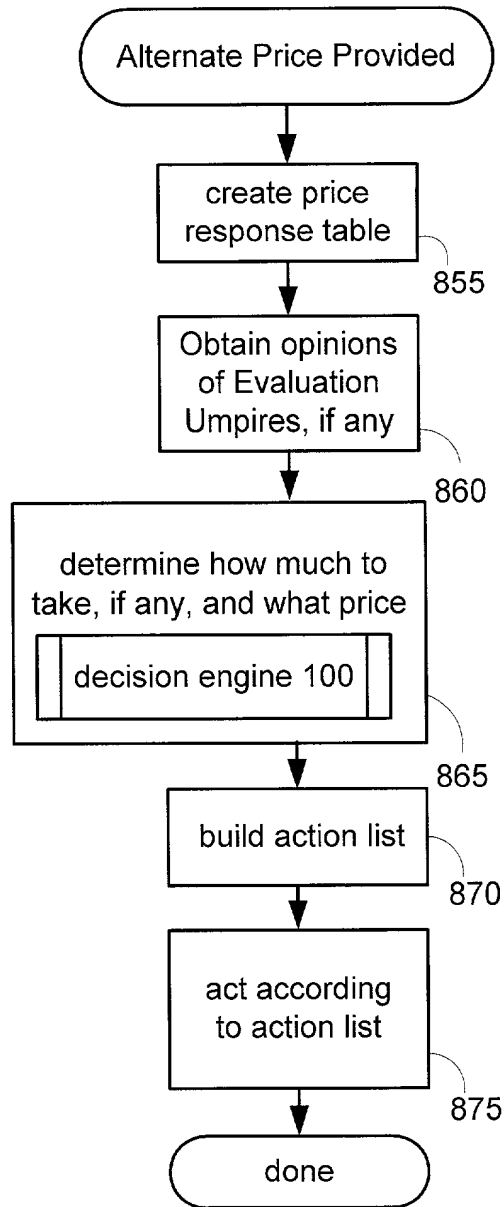


FIG. 36

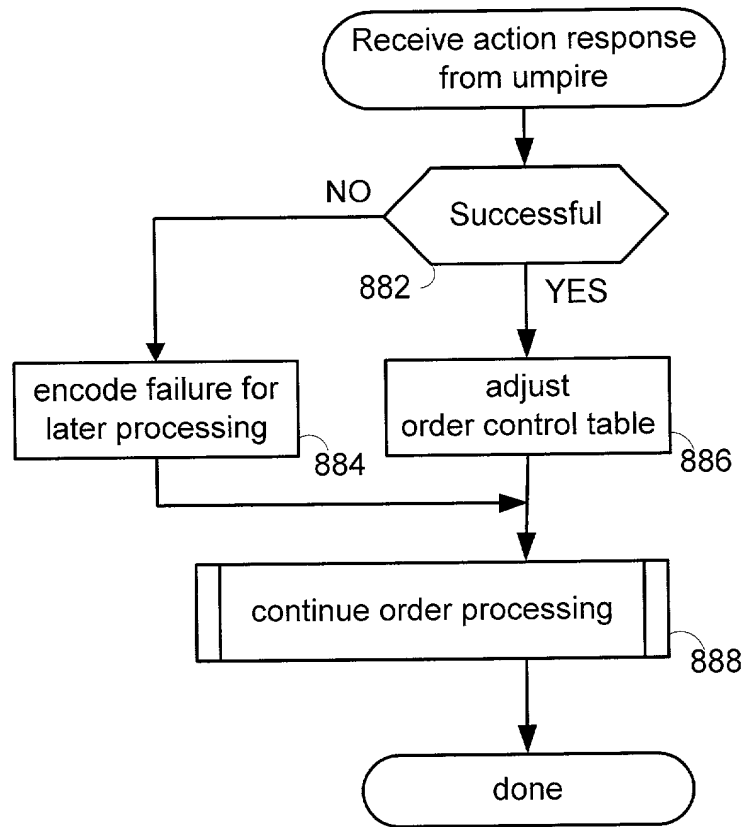


FIG. 37

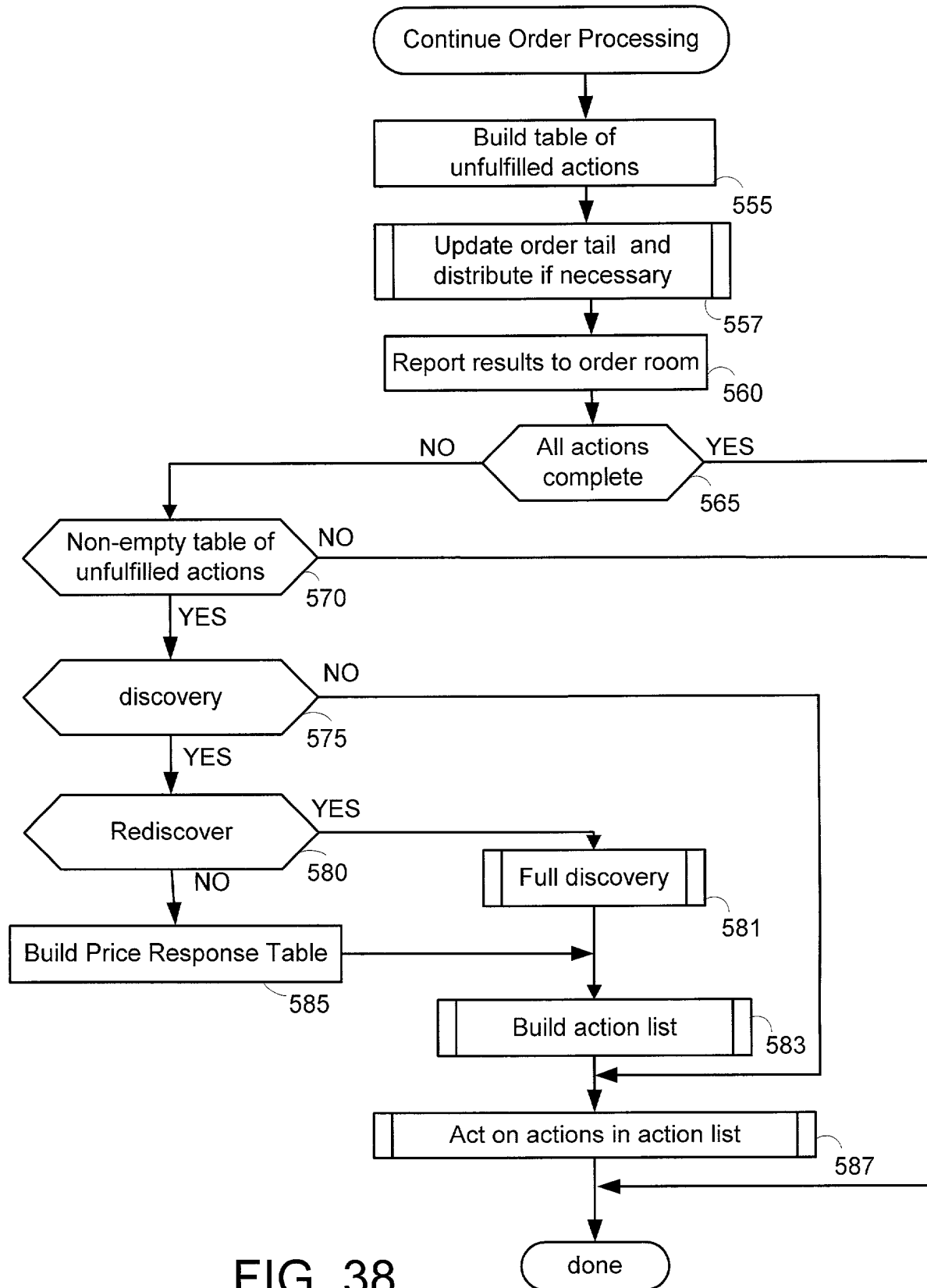


FIG. 38

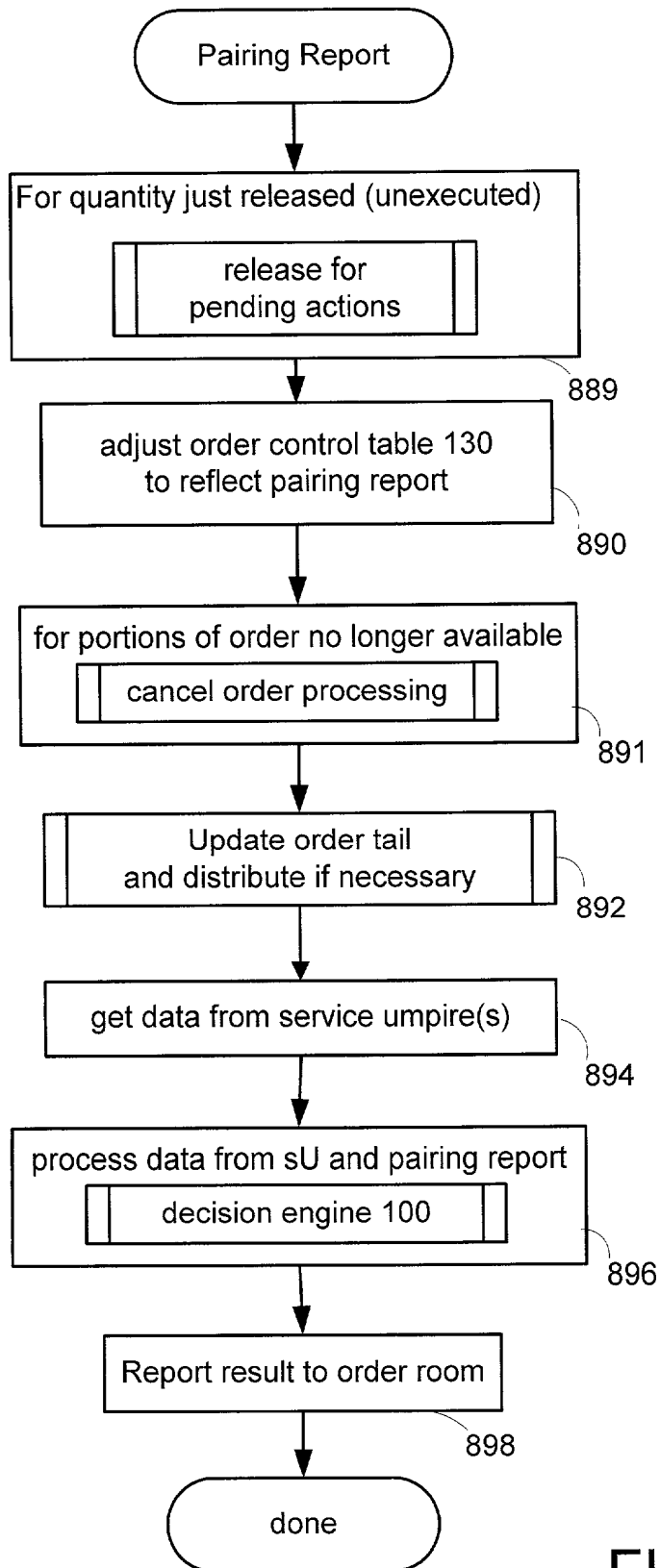


FIG. 39

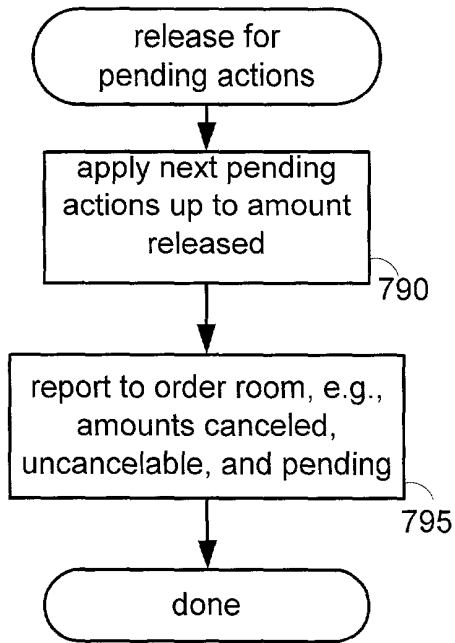


FIG. 40

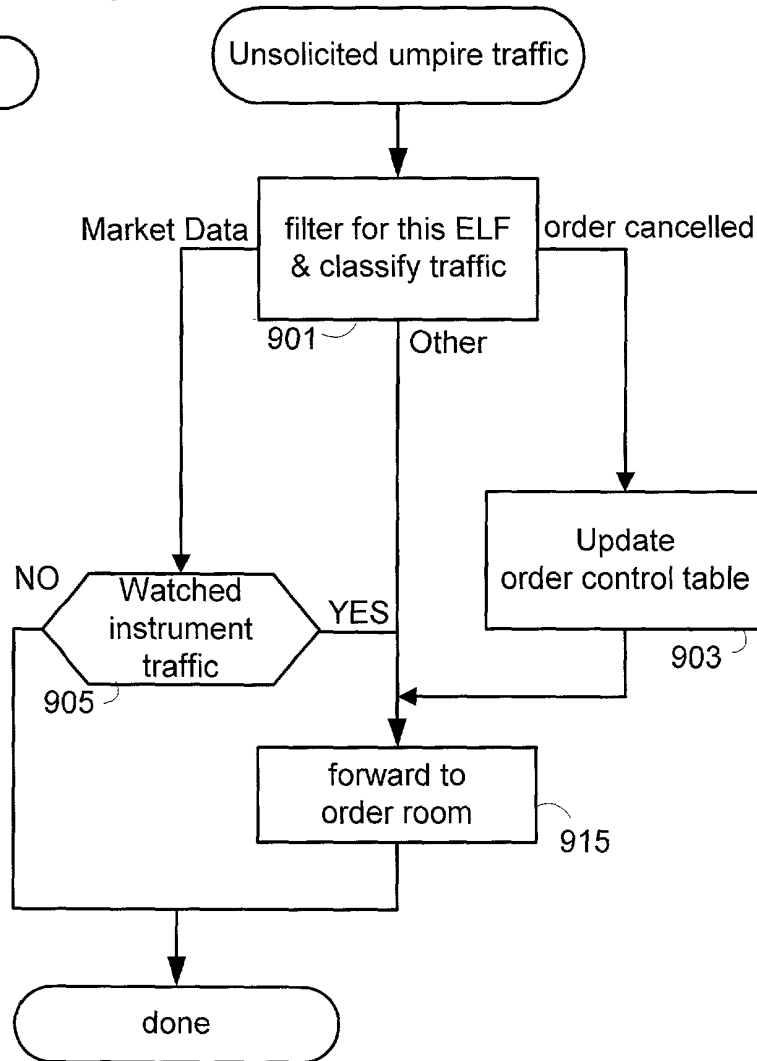


FIG. 41

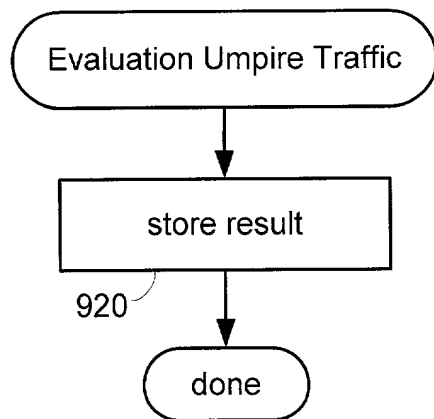


FIG. 42

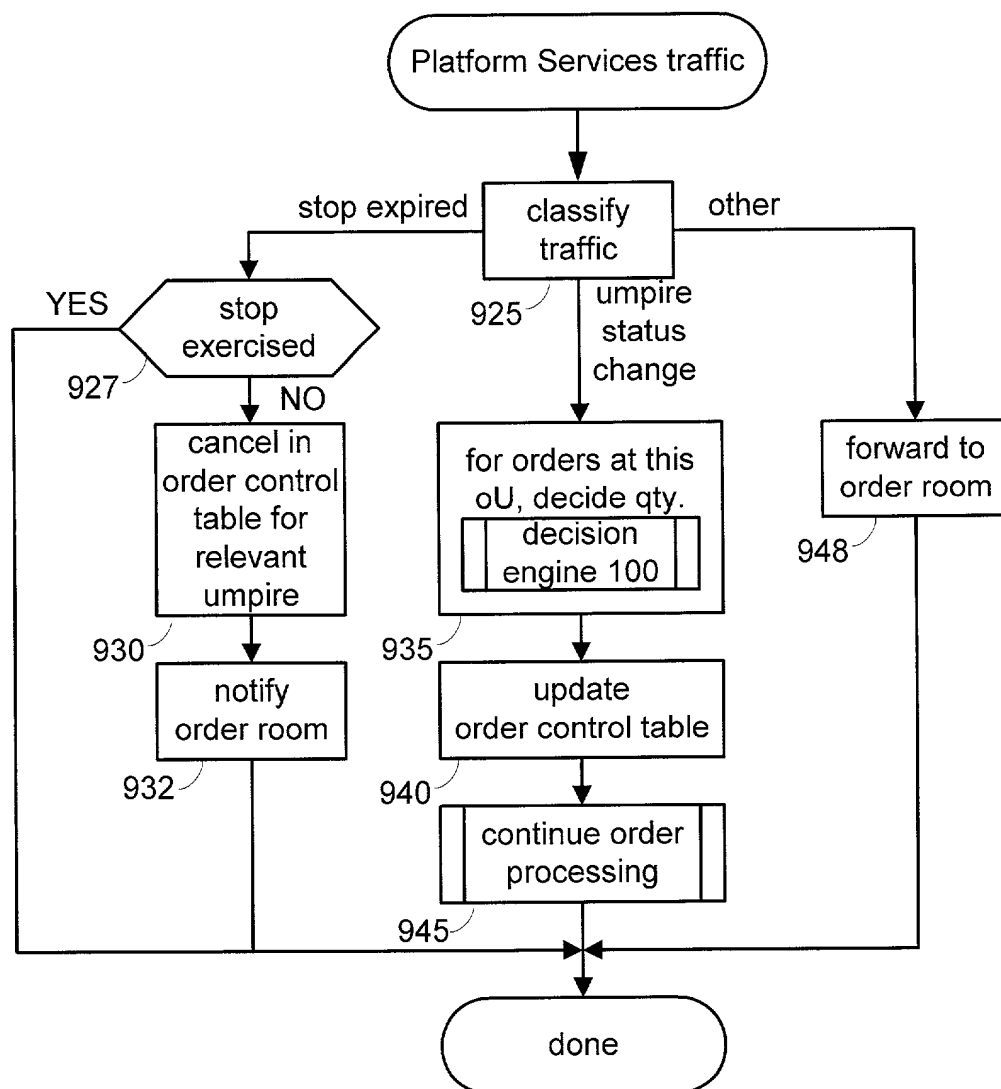


FIG. 43

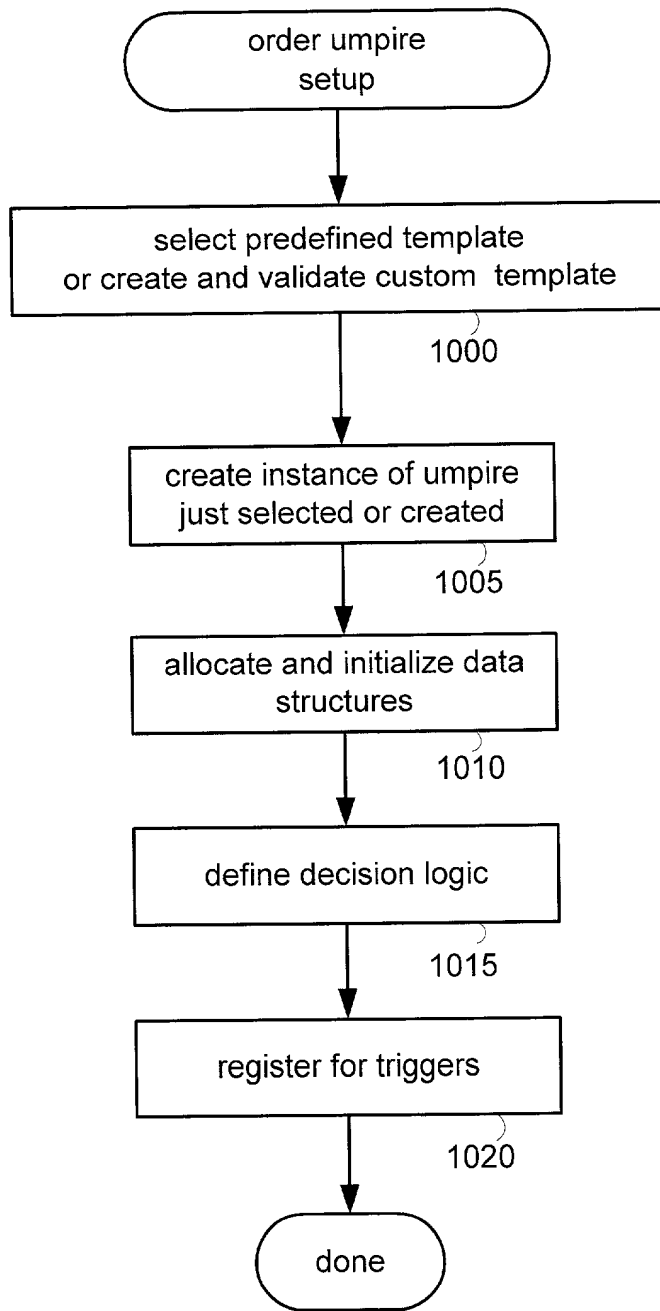


FIG. 44

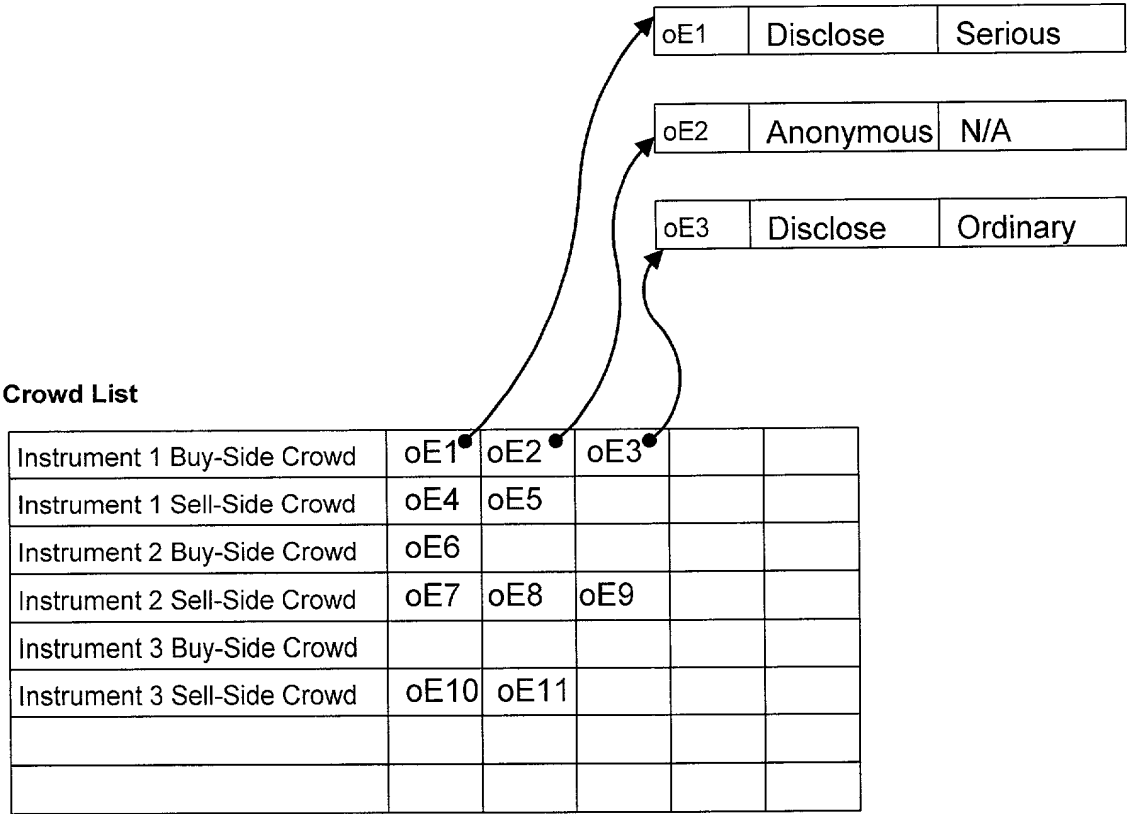


FIG. 45



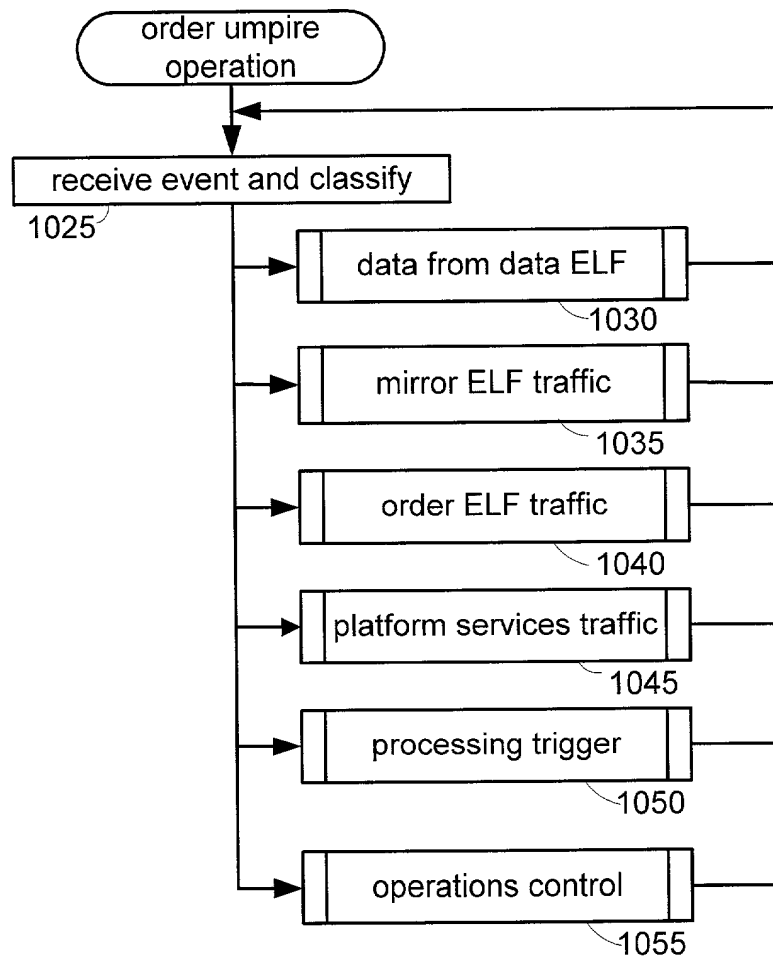


FIG. 46



FIG. 47

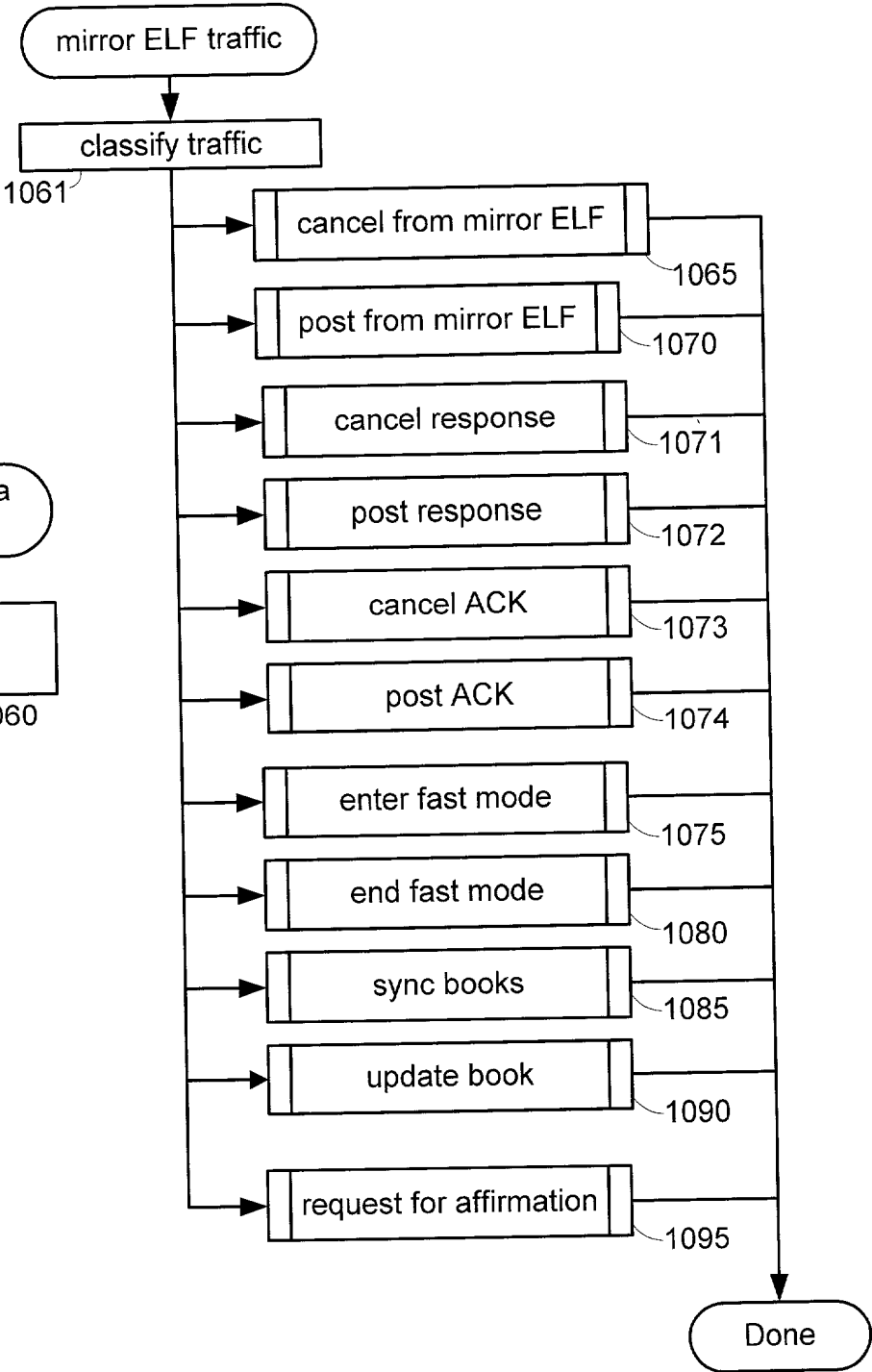


FIG. 48

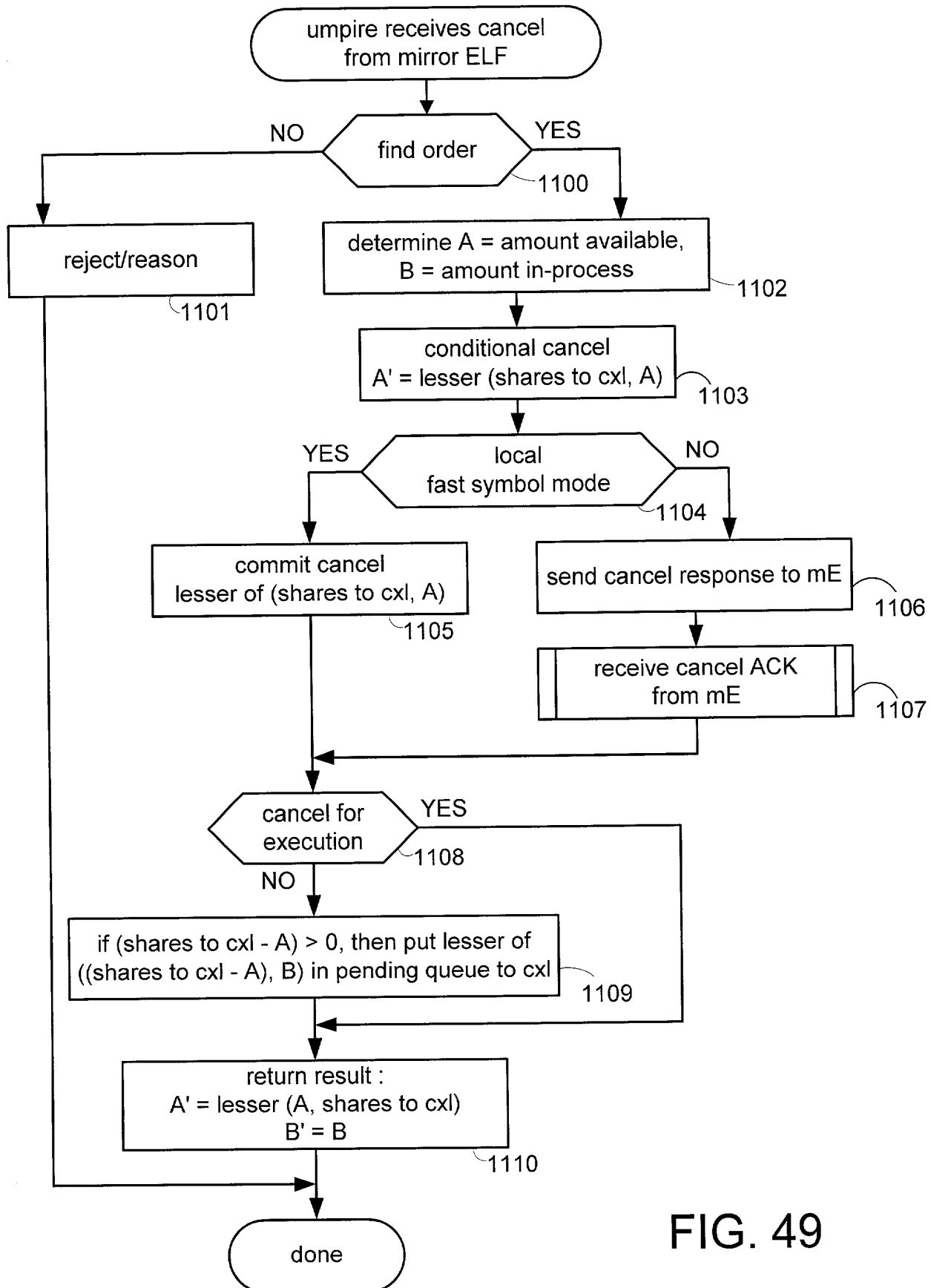


FIG. 49

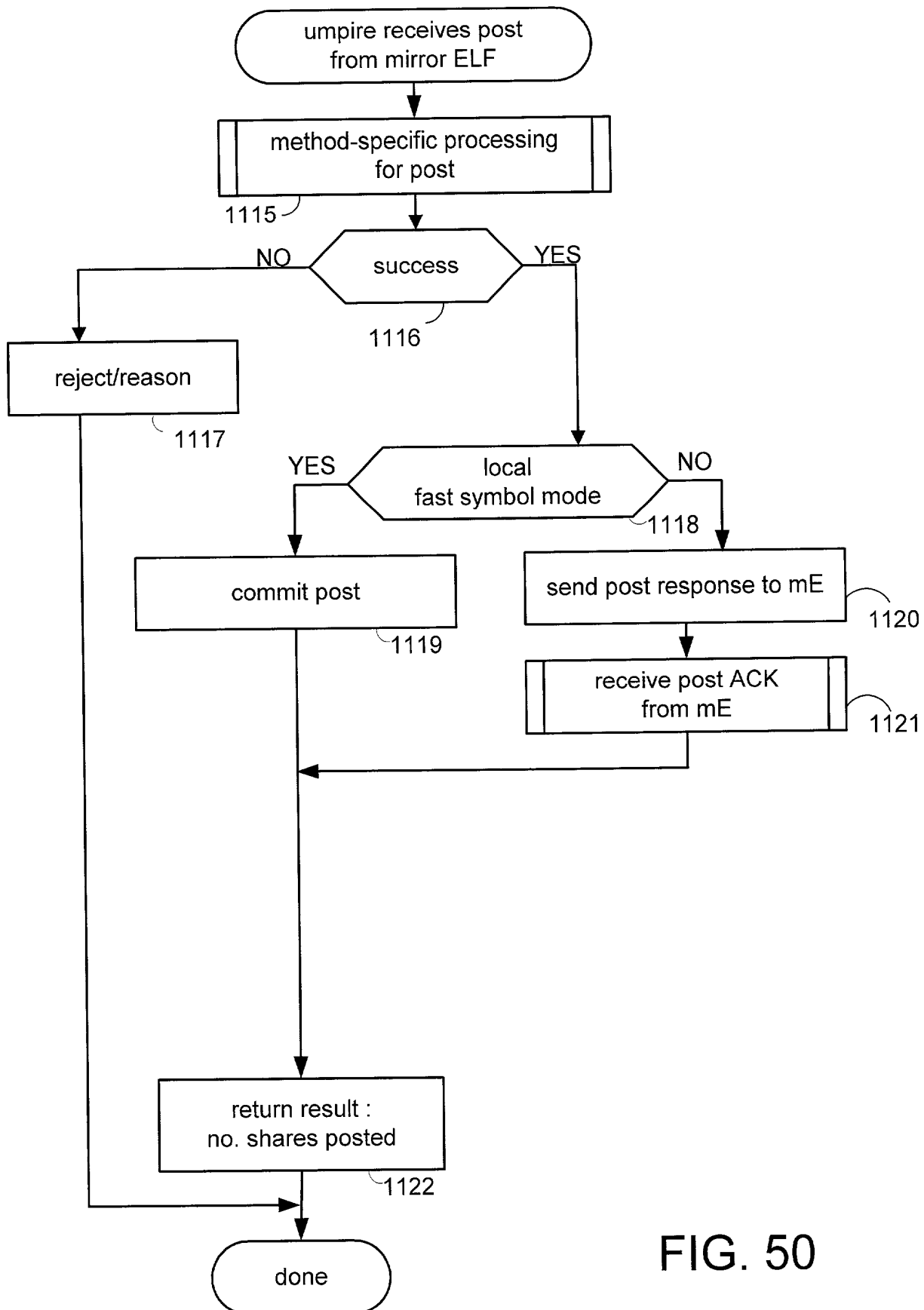


FIG. 50

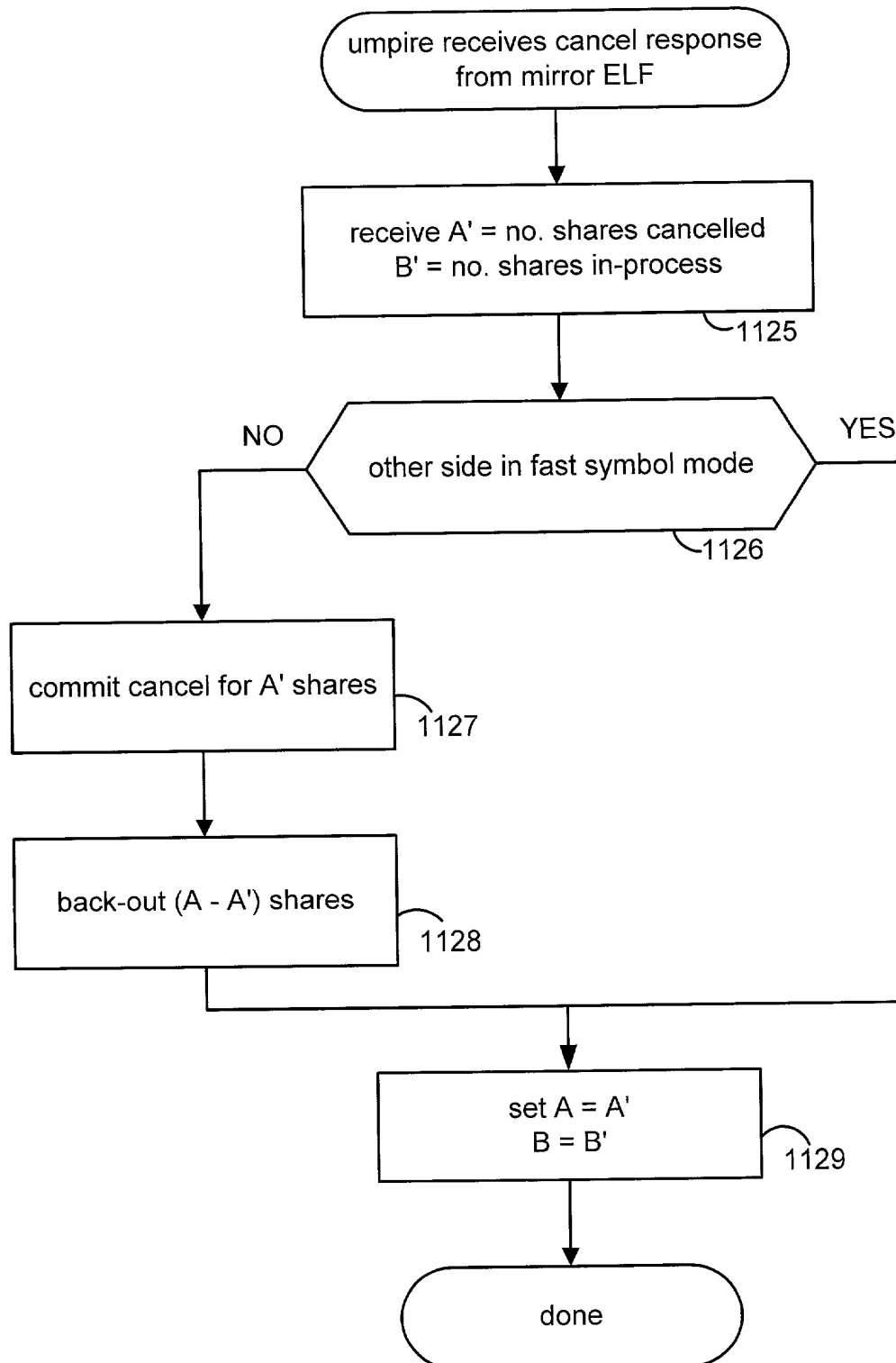


FIG. 51

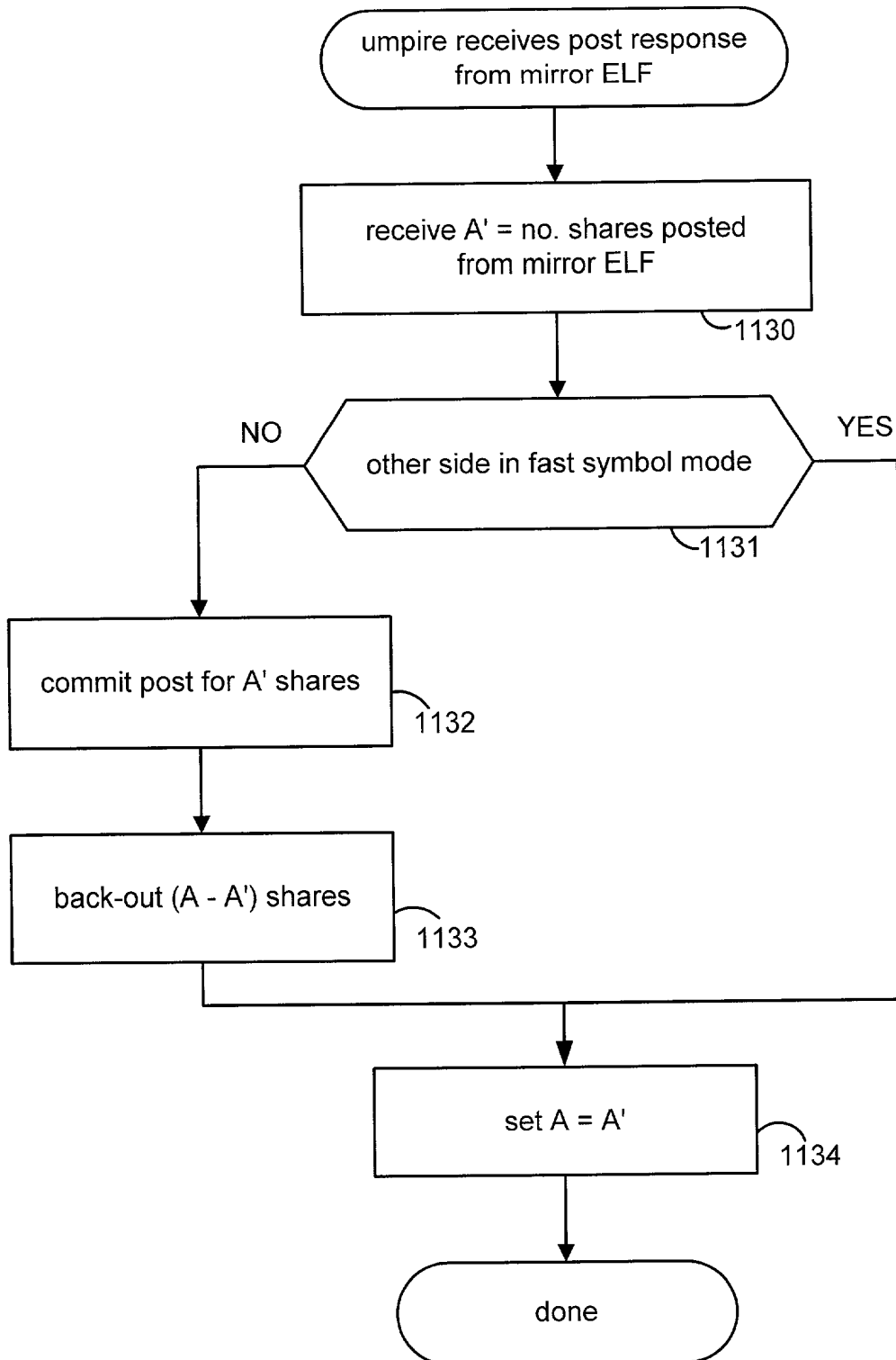


FIG. 52

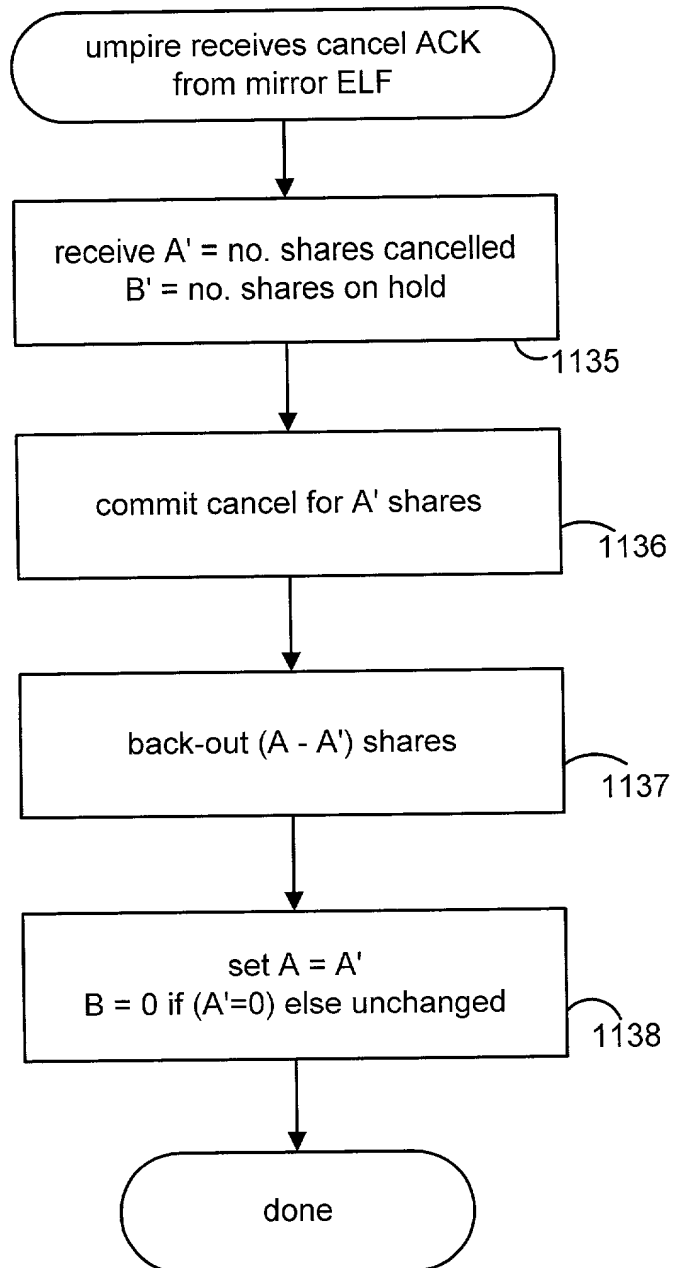


FIG. 53

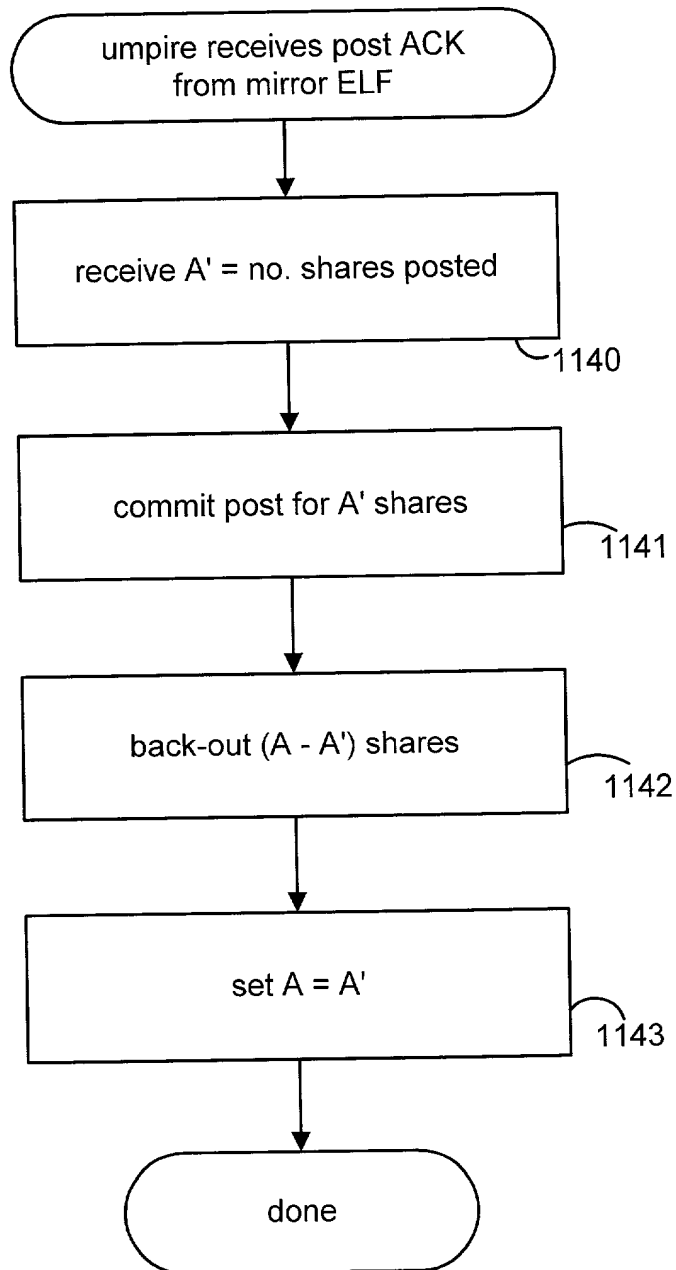


FIG. 54



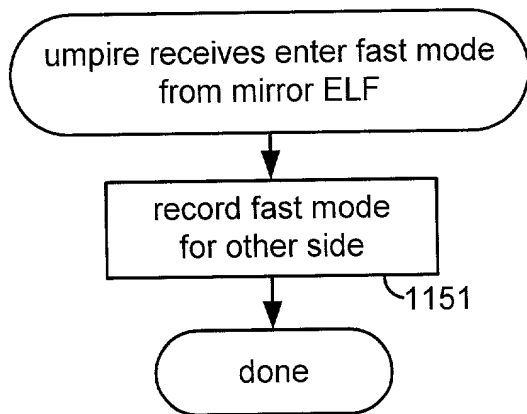


FIG. 55A

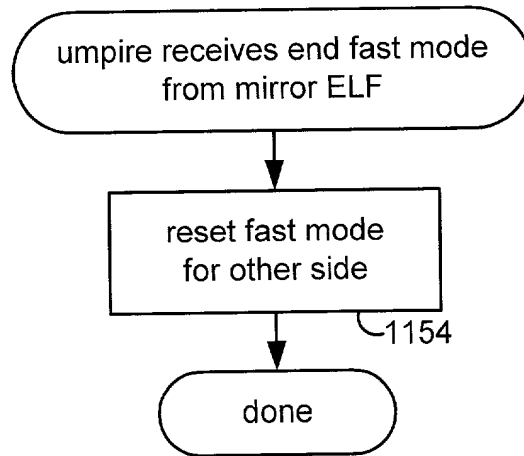


FIG. 55B

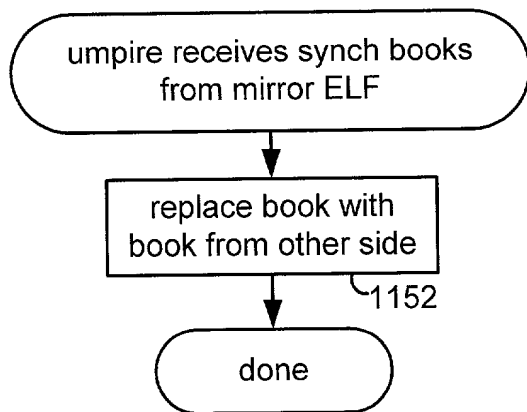


FIG. 56

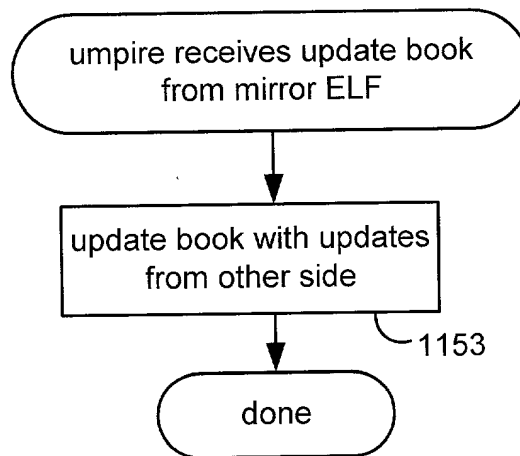


FIG. 57

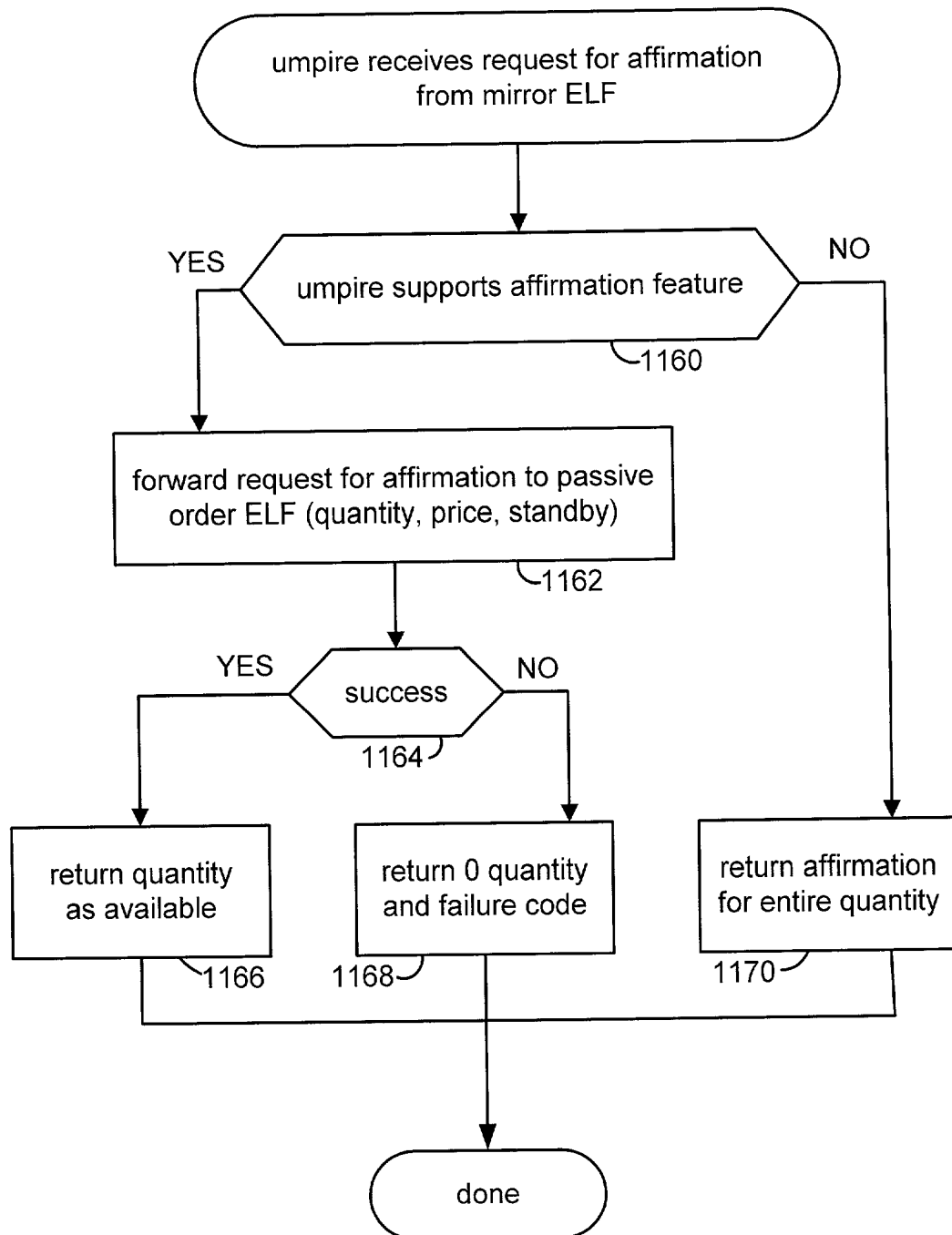
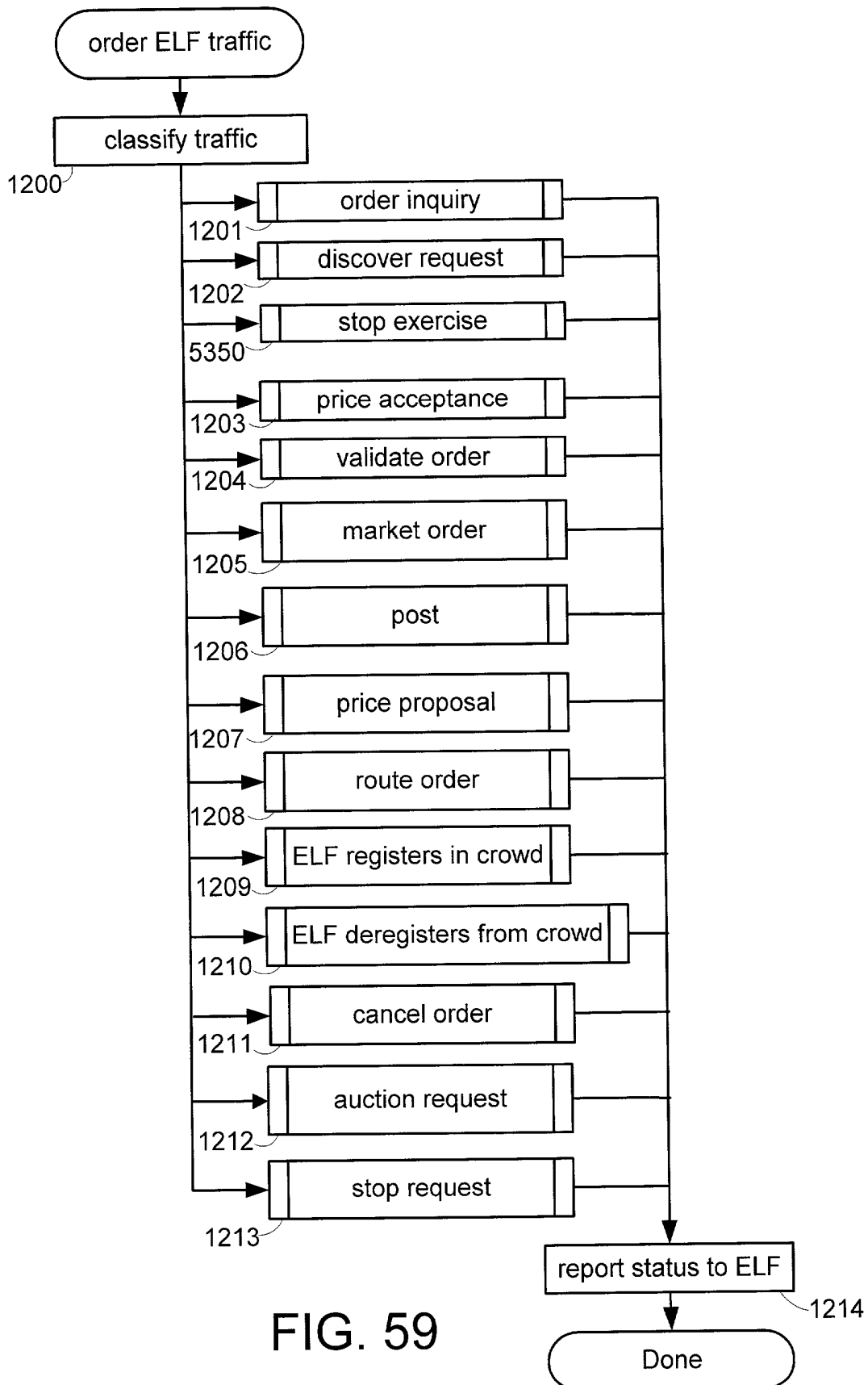


FIG. 58



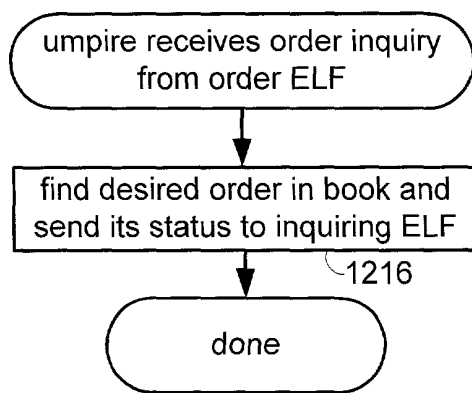


FIG. 60

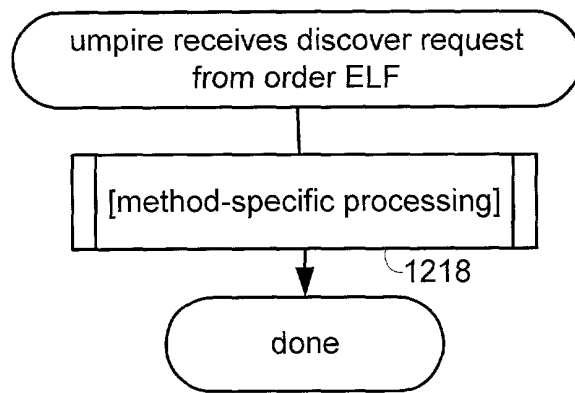


FIG. 61

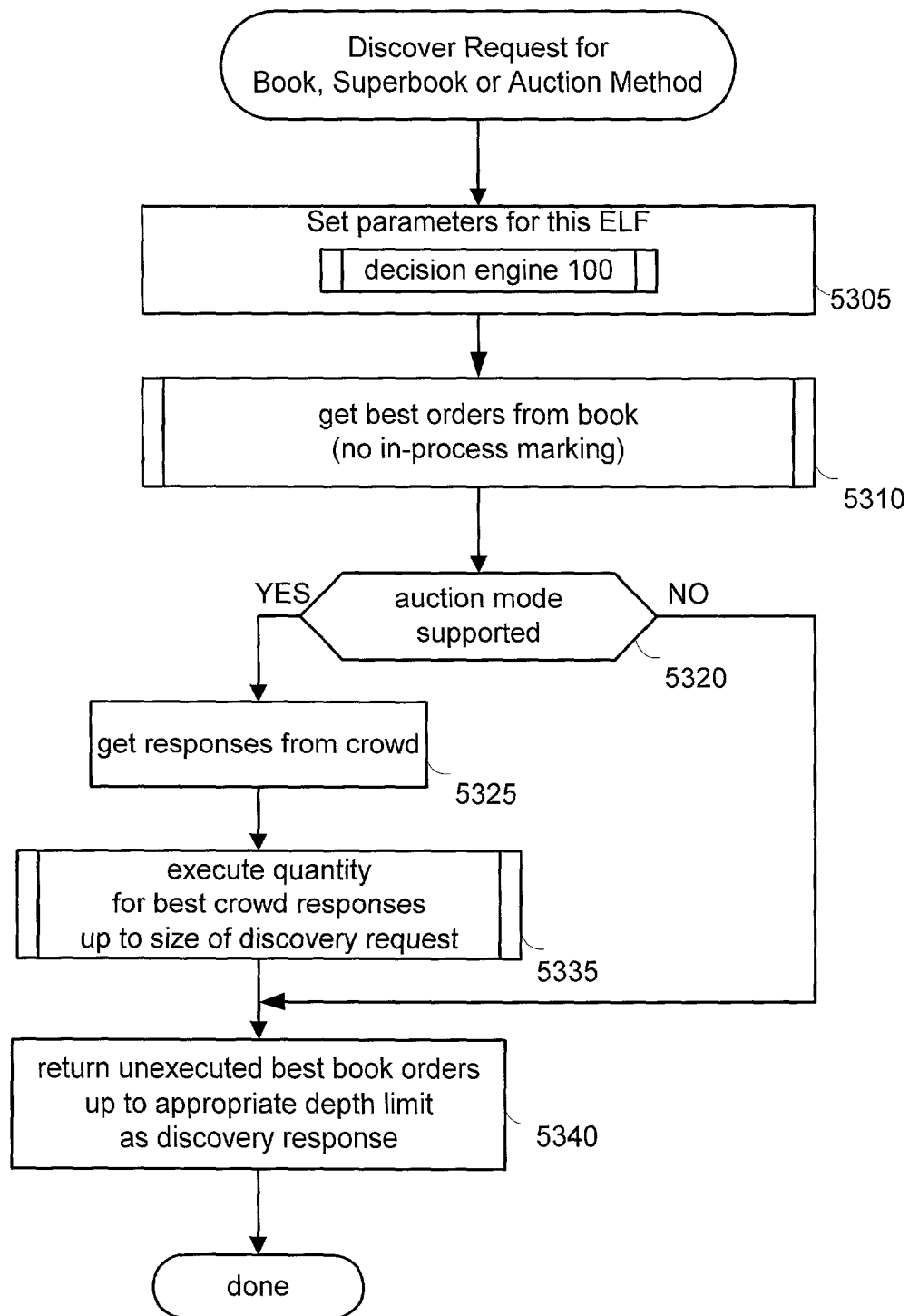


FIG. 62

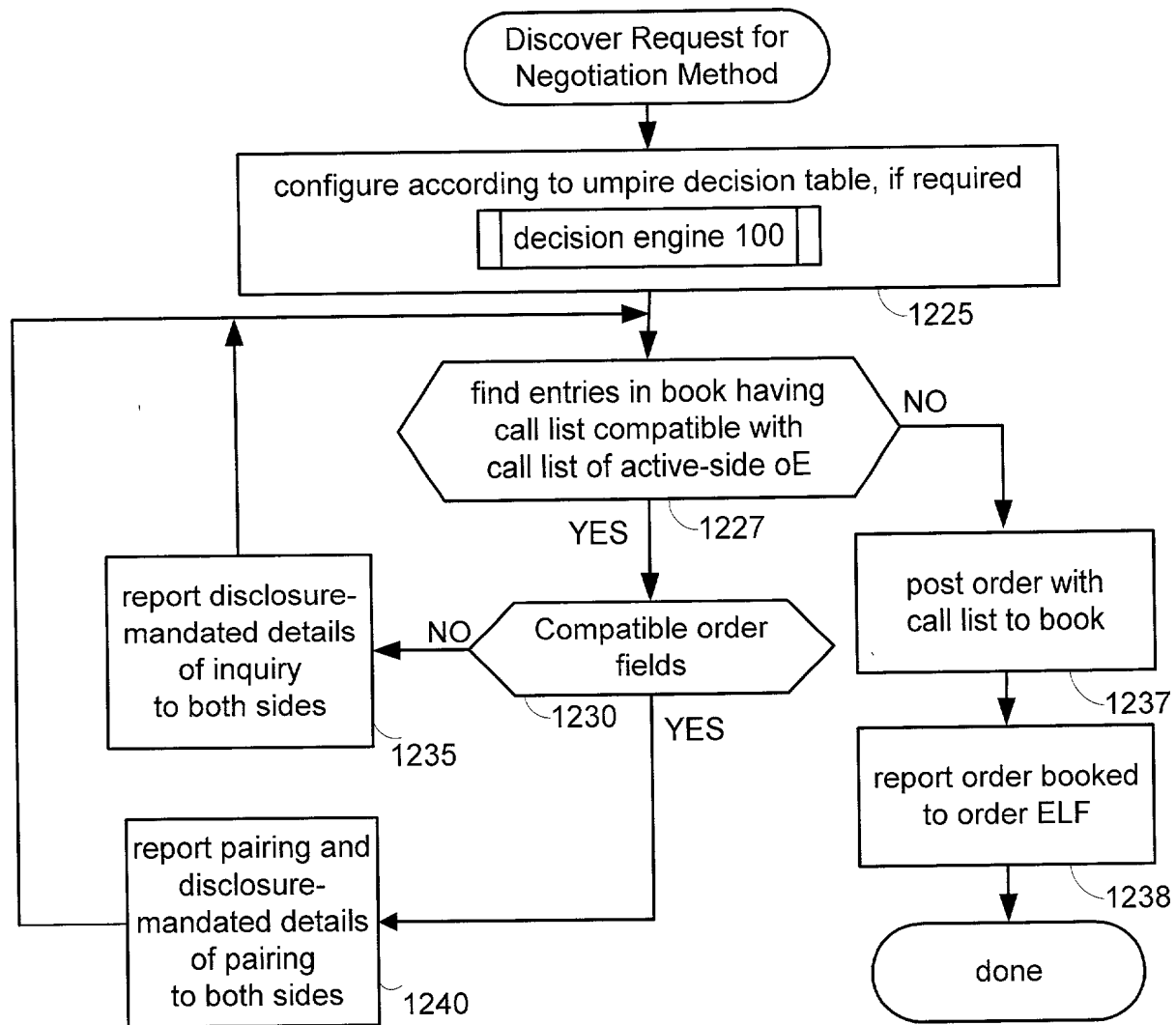


FIG. 63

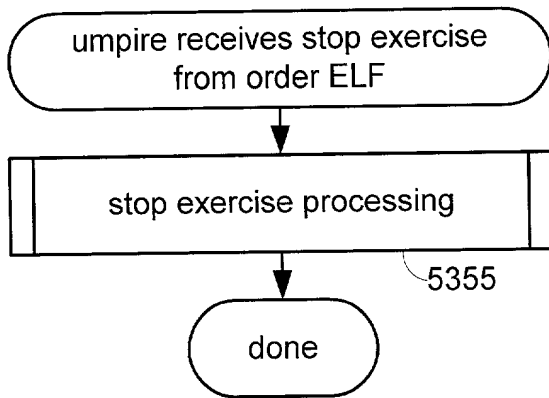


FIG. 64A

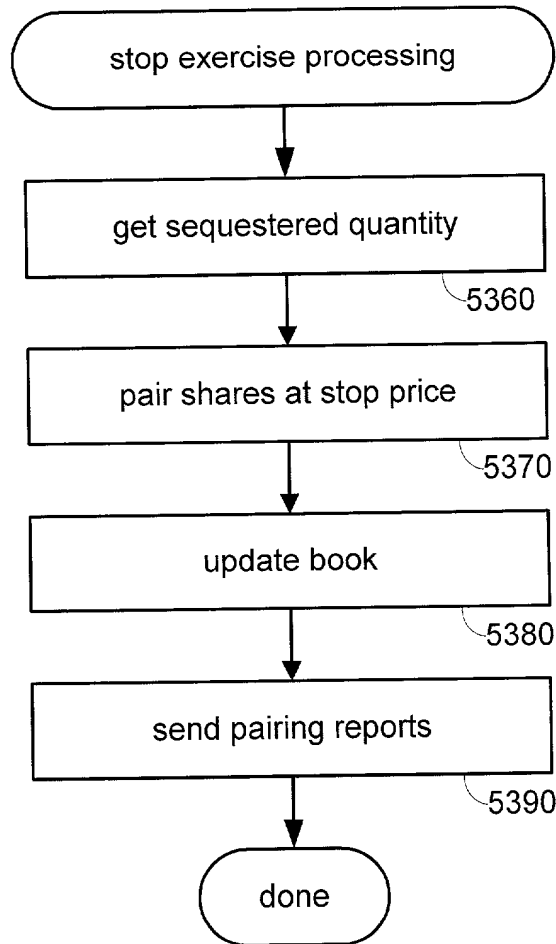


FIG. 64B

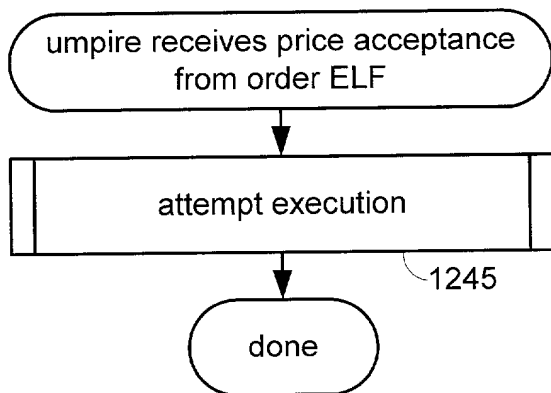
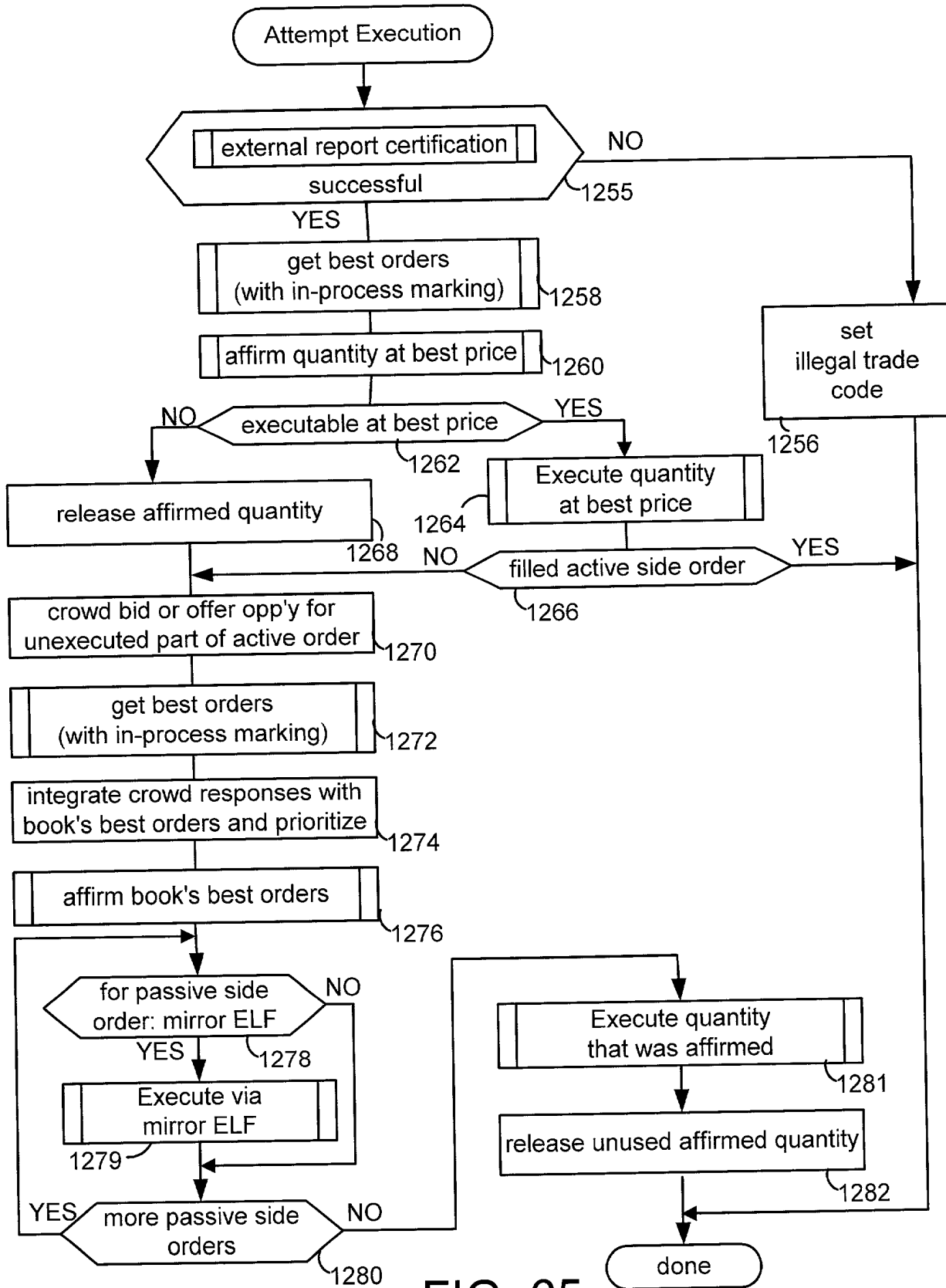


FIG. 64C





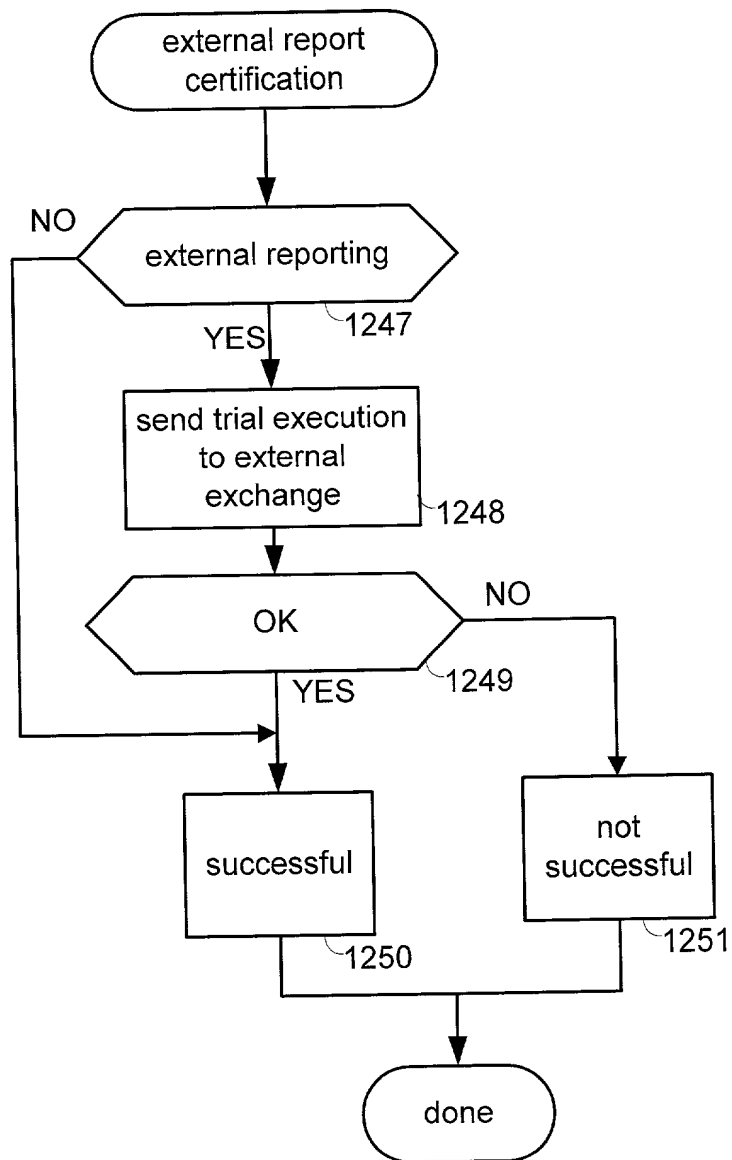


FIG. 66

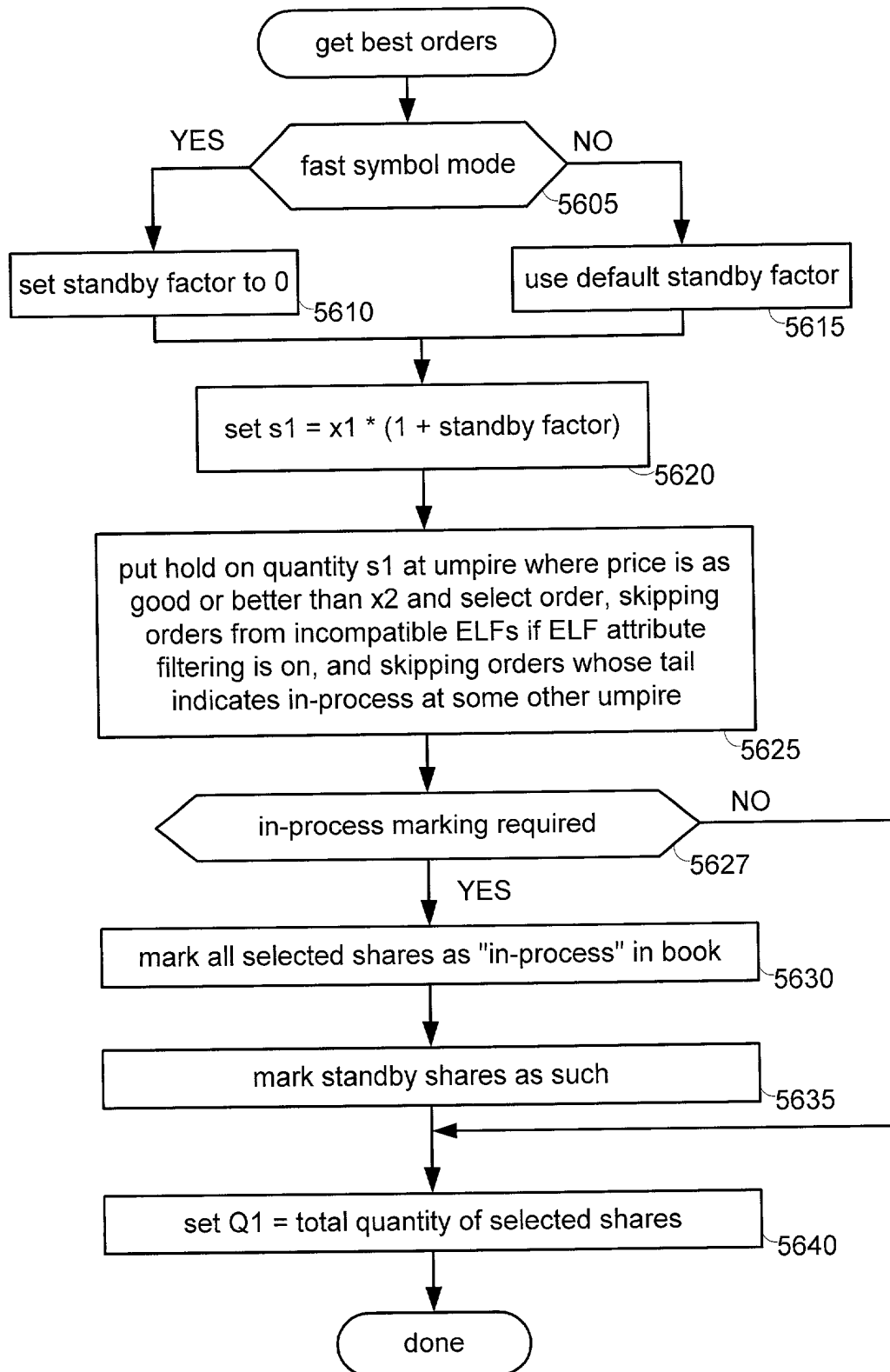


FIG. 67

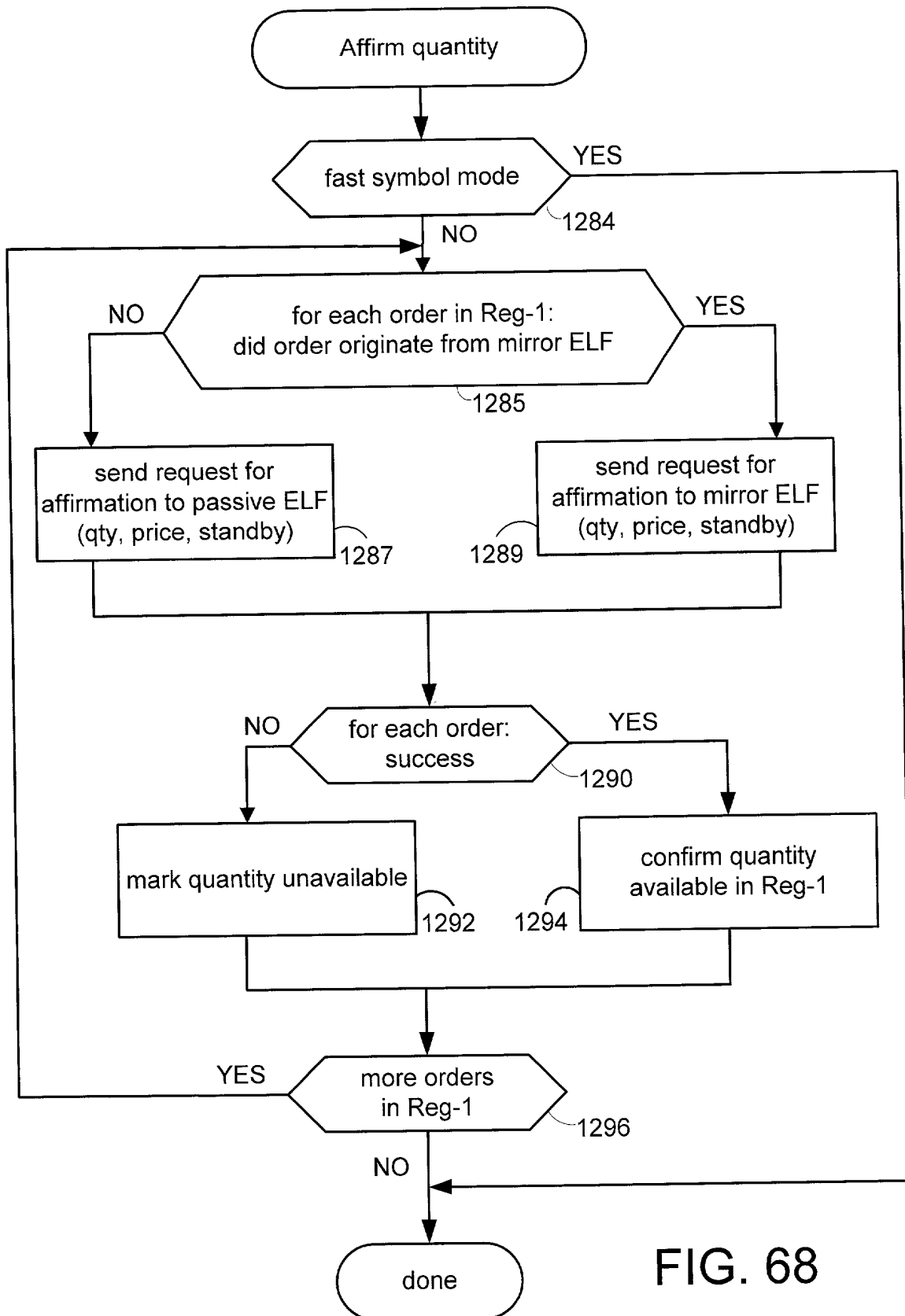


FIG. 68

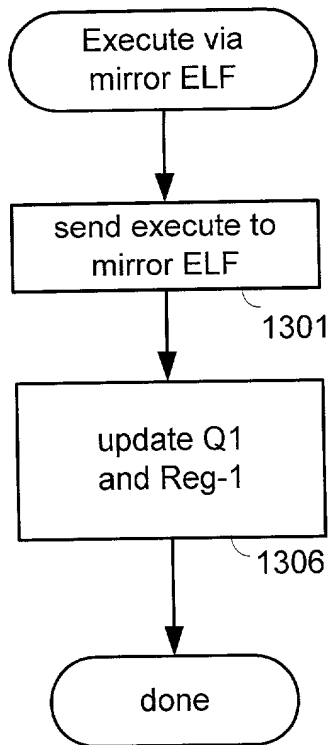


FIG. 69

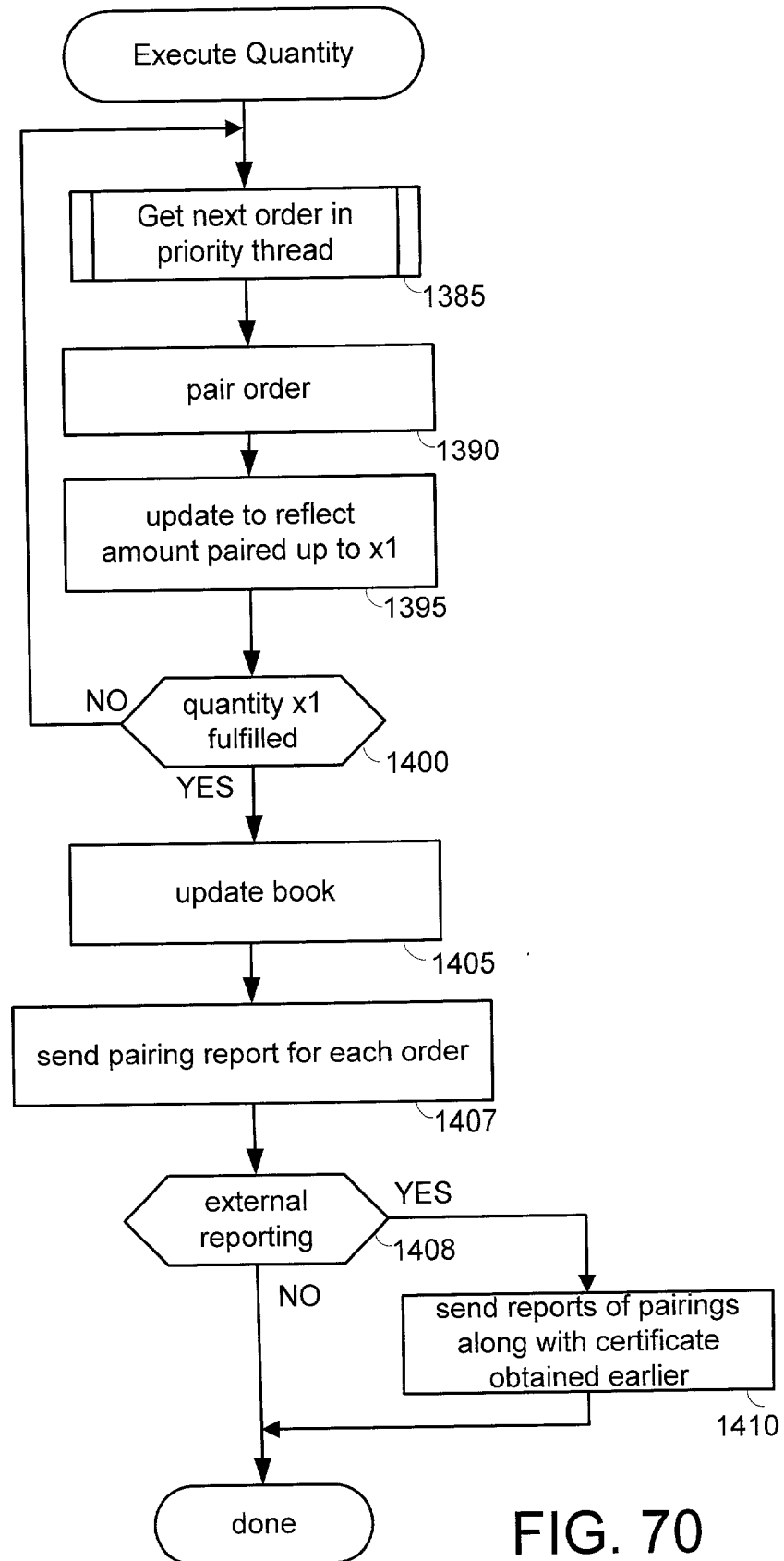


FIG. 70

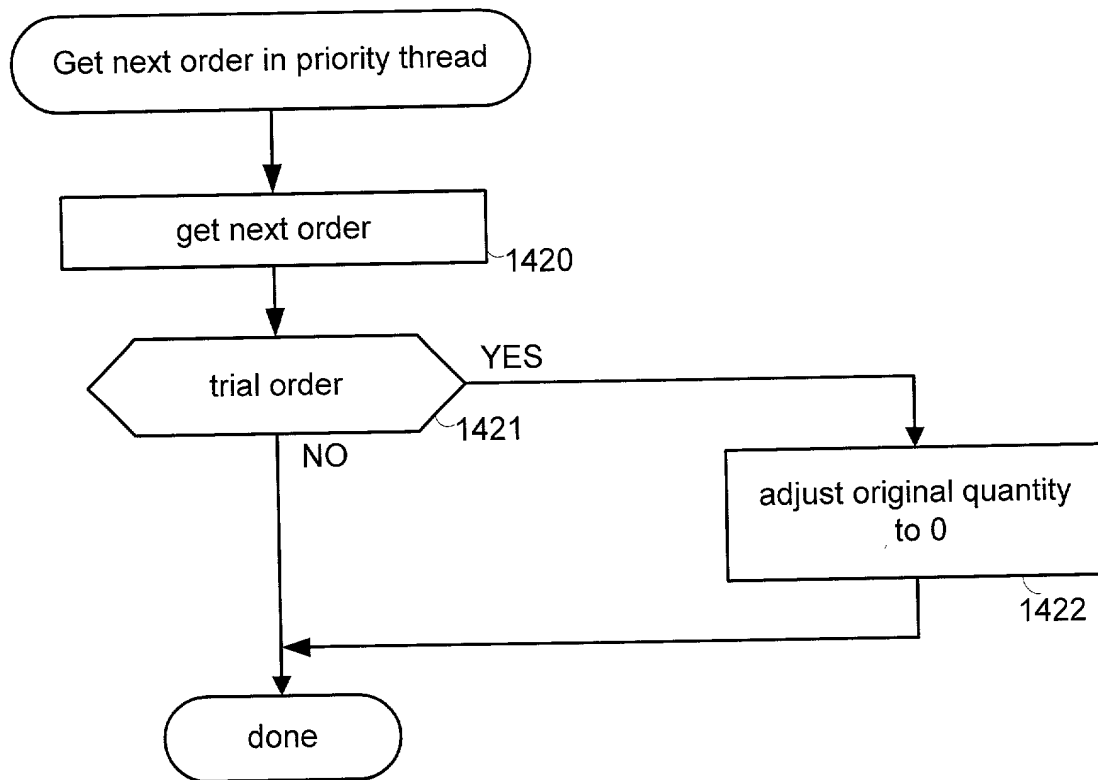


FIG. 71

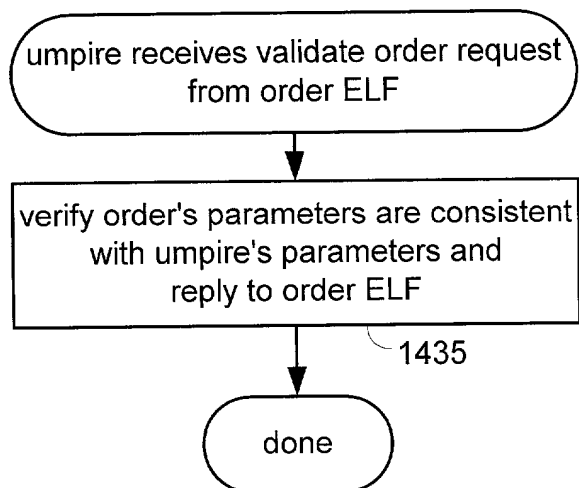


FIG. 72

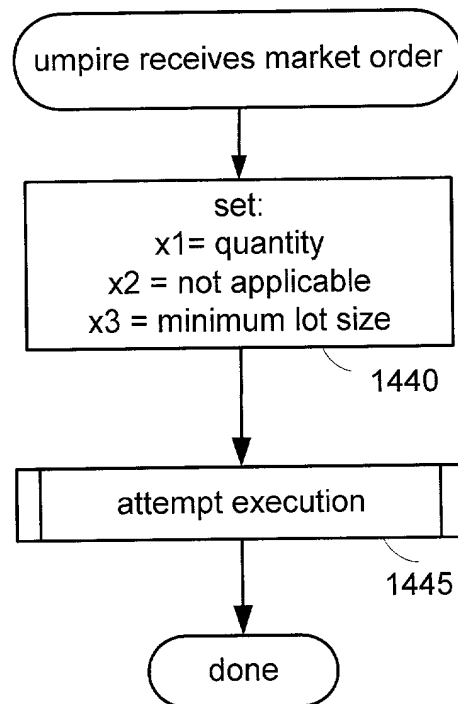


FIG. 73

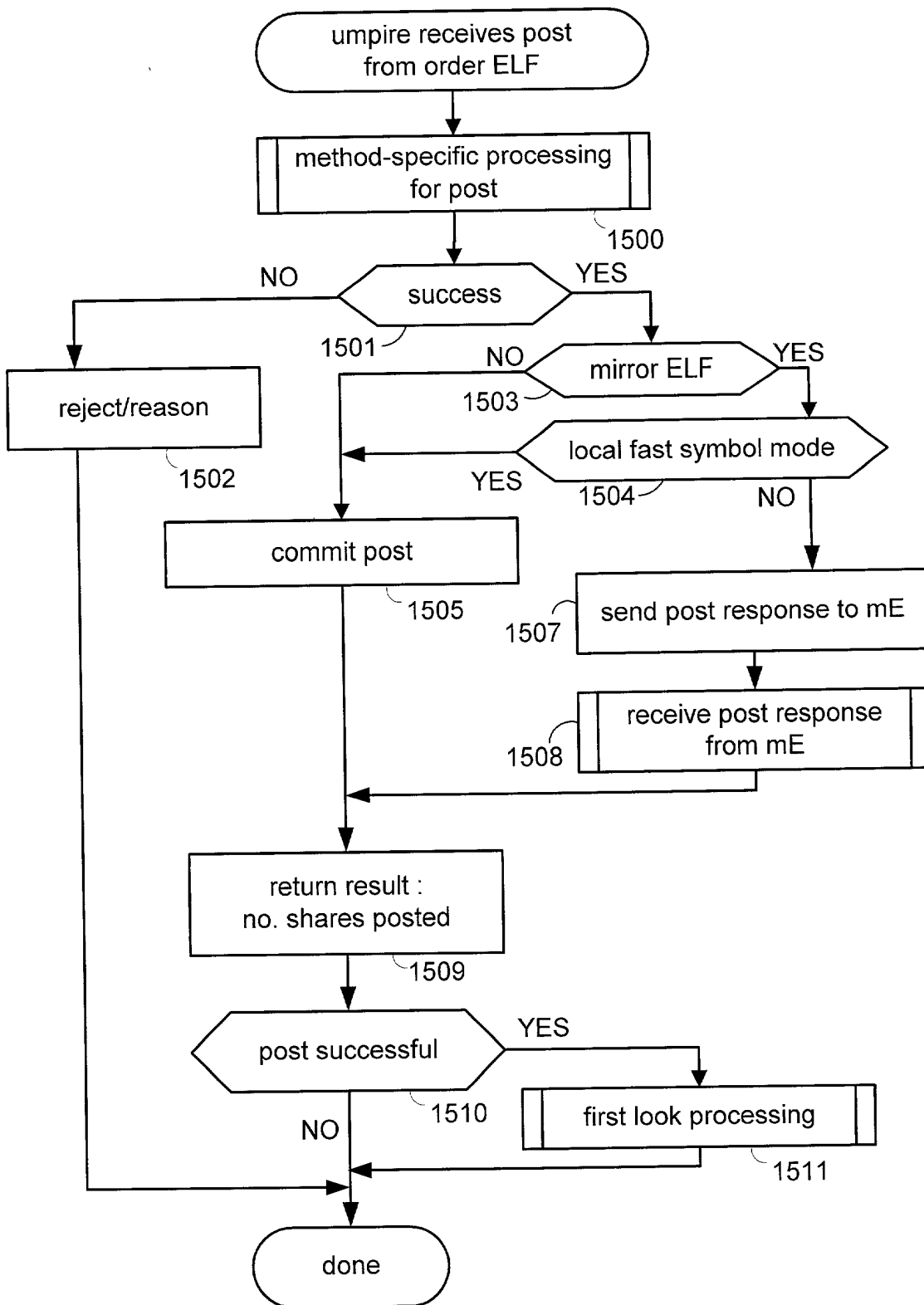


FIG. 74

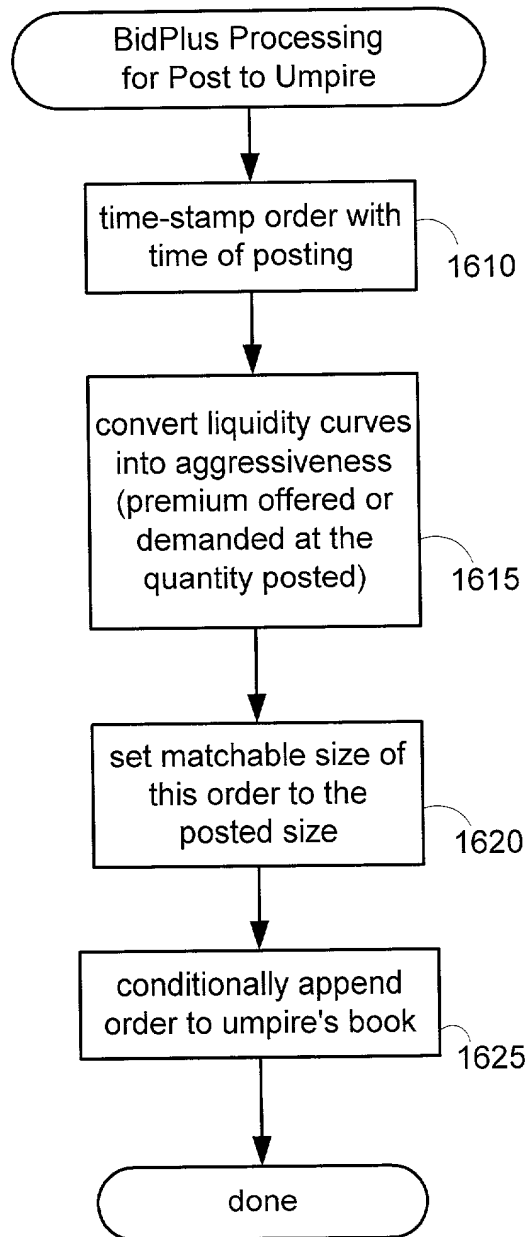


FIG. 75



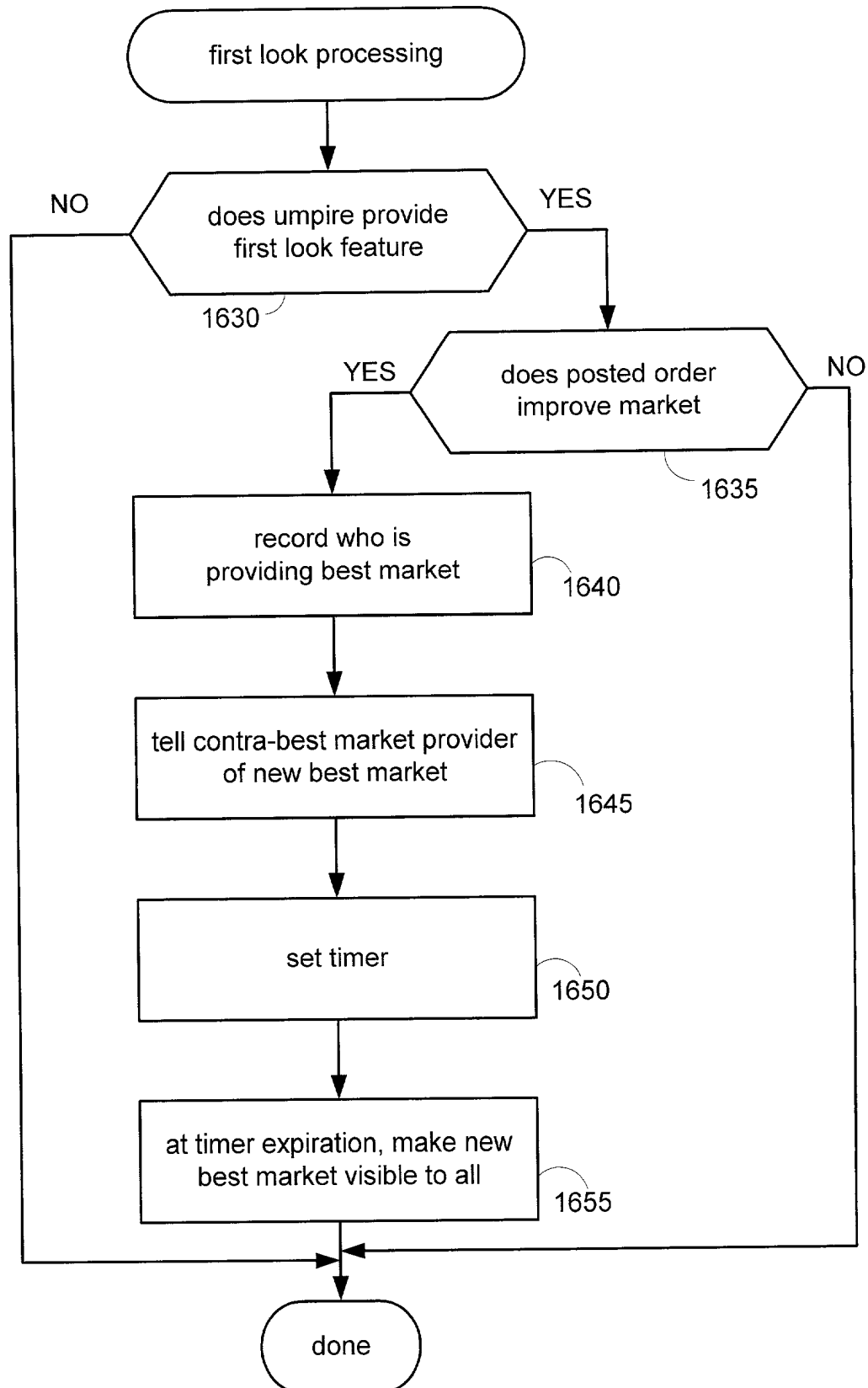


FIG. 76

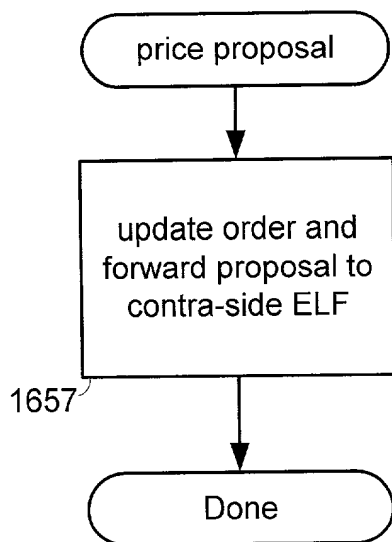


FIG. 77

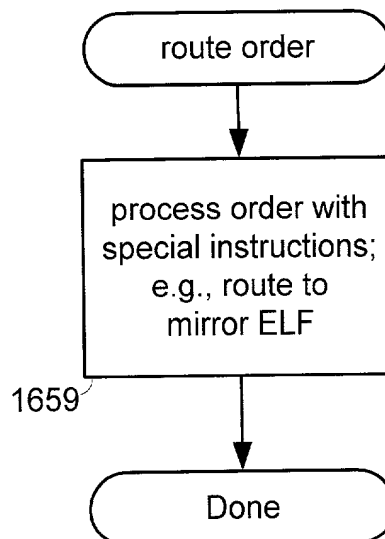


FIG. 78

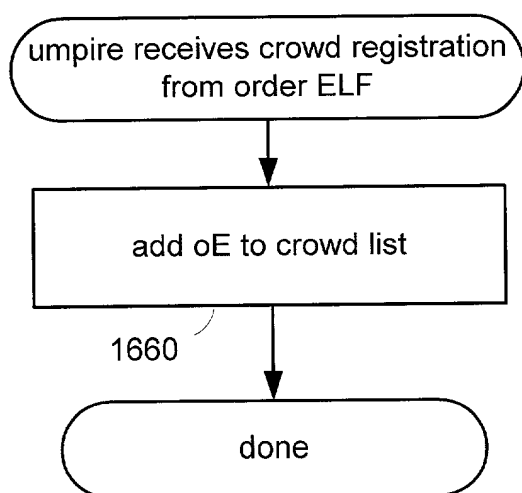


FIG. 79

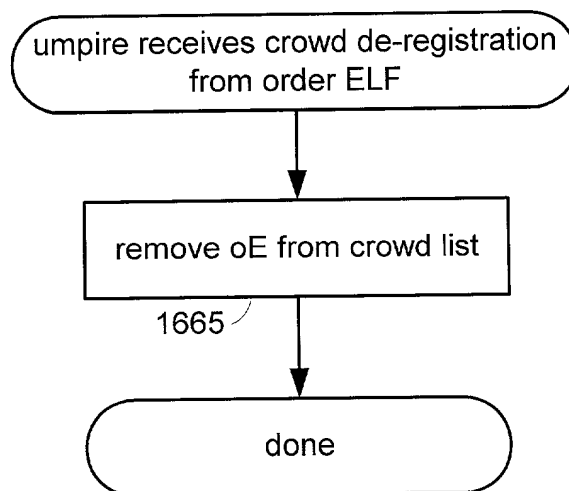


FIG. 80

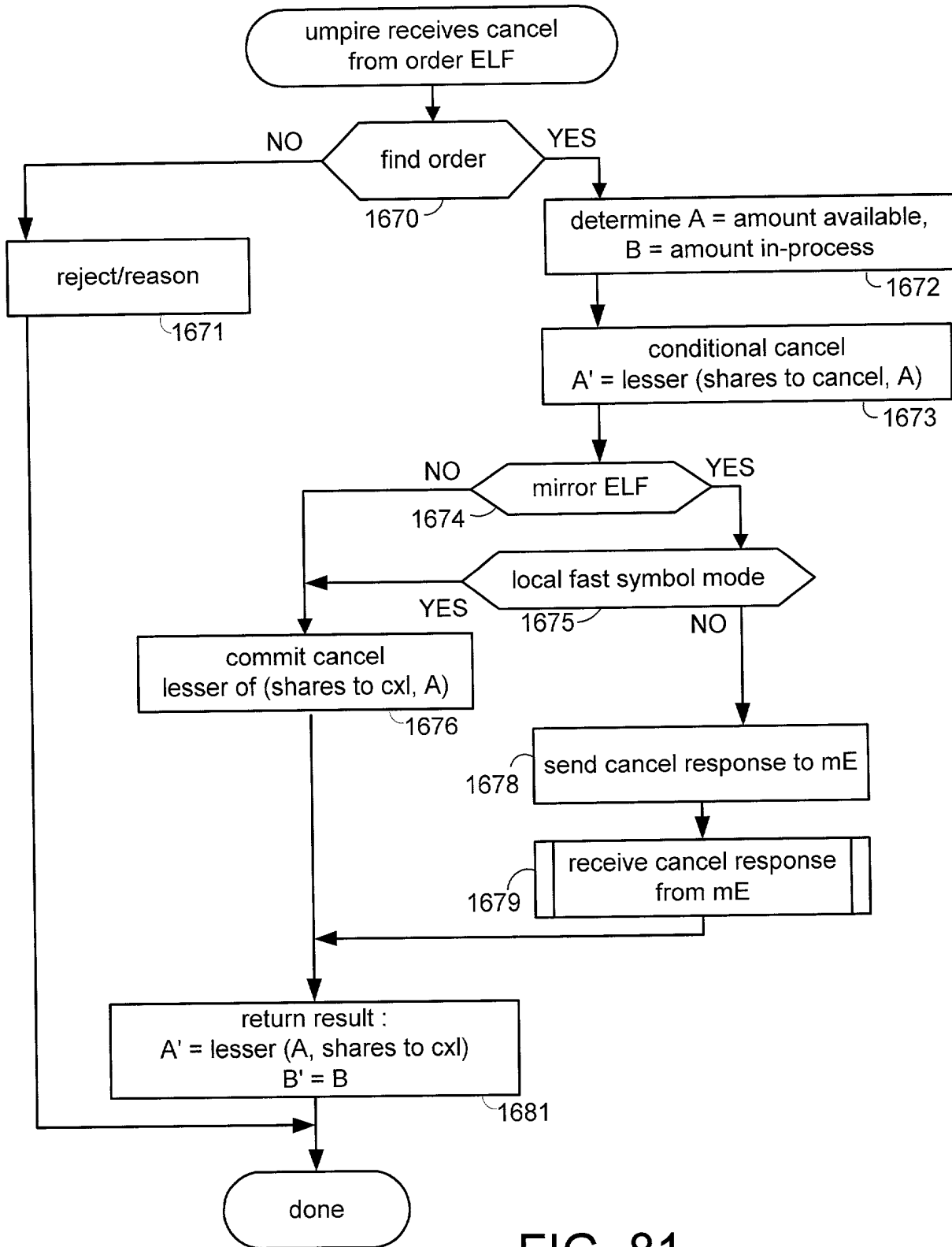


FIG. 81

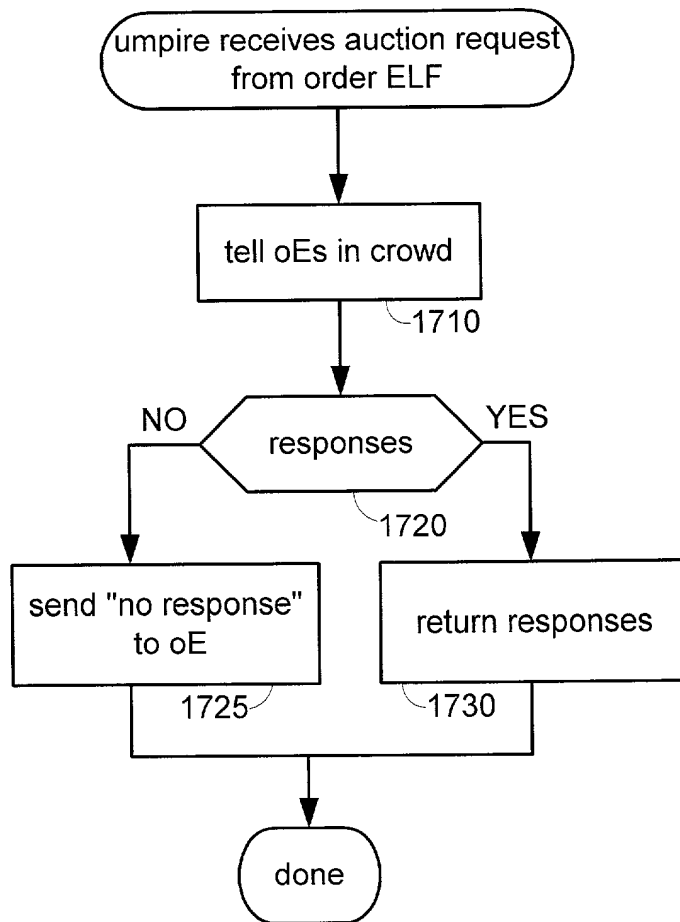


FIG. 82

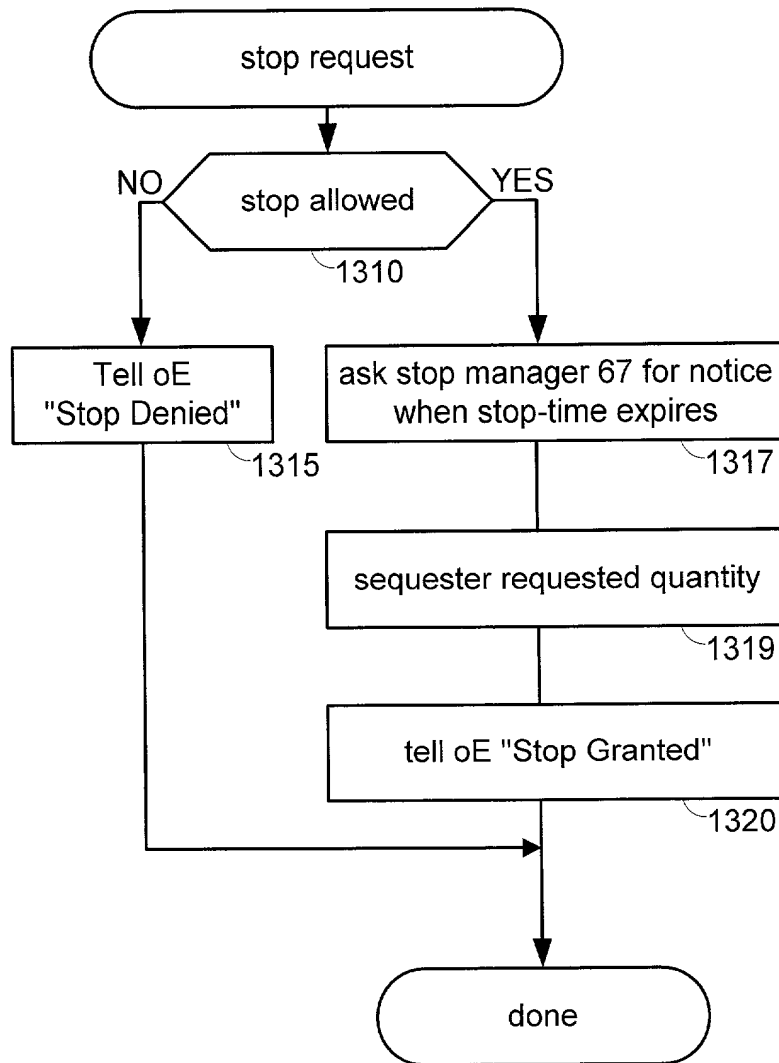


FIG. 83

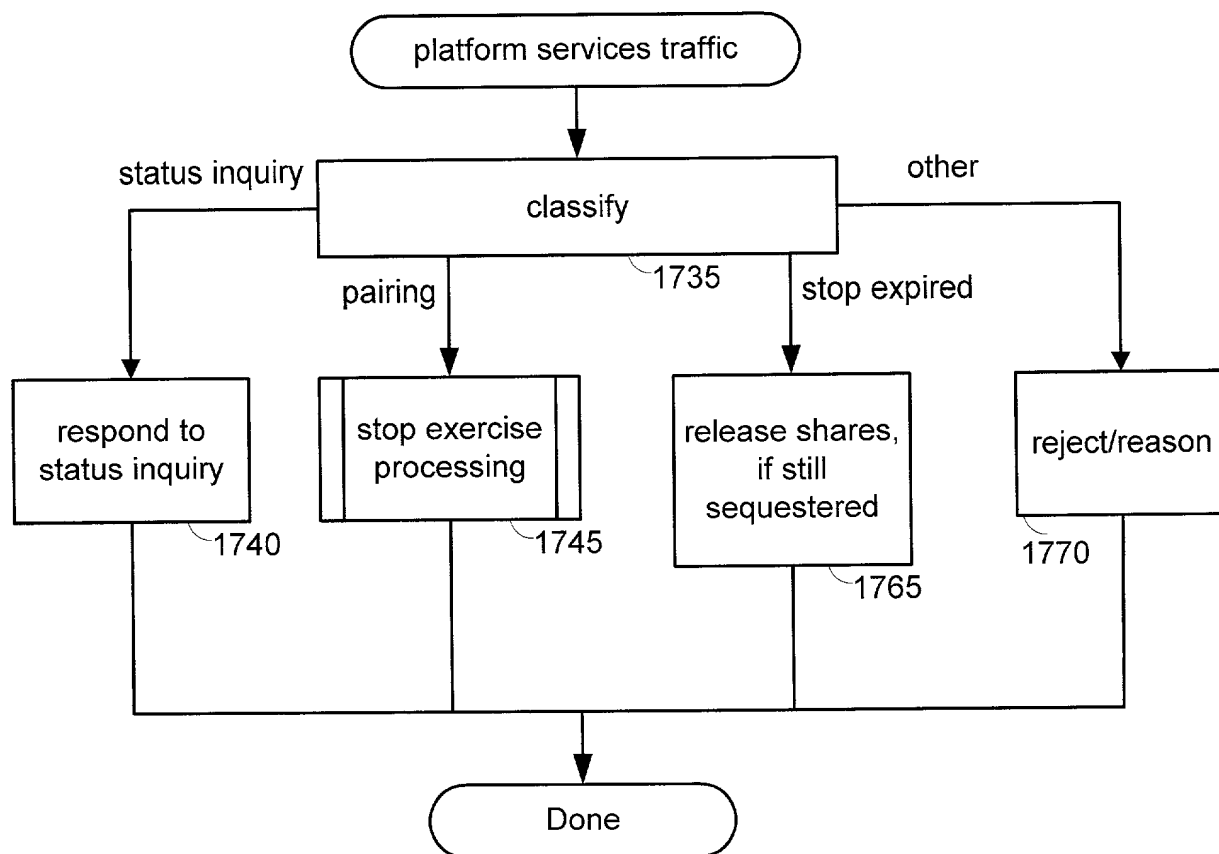


FIG. 84

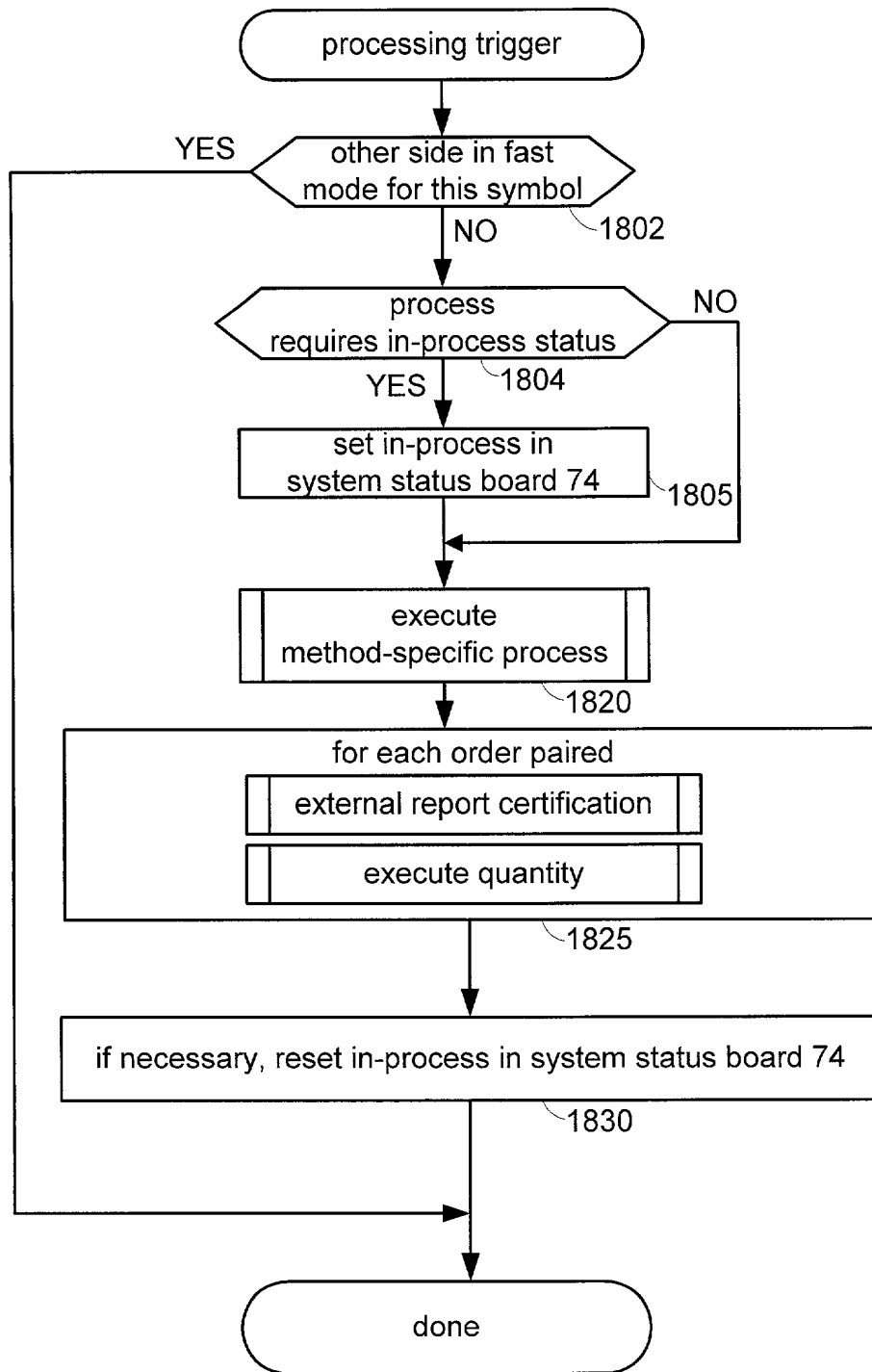


FIG. 85

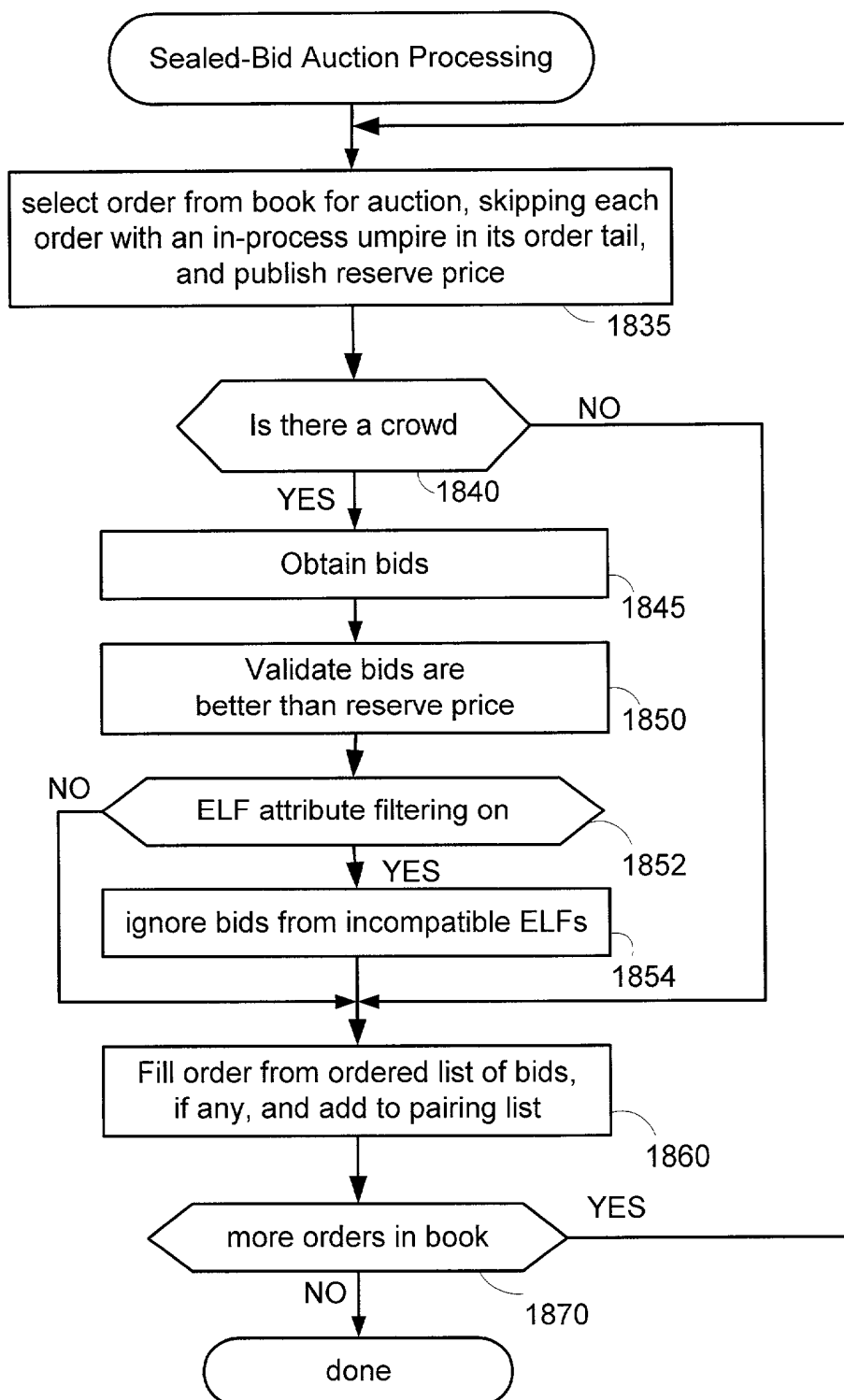


FIG. 86



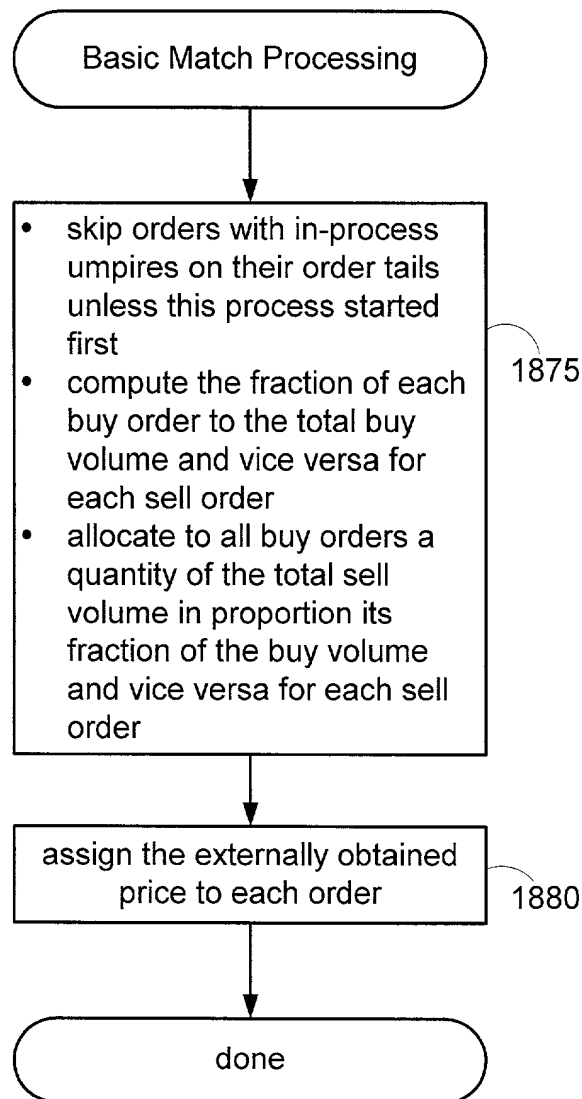


FIG. 87

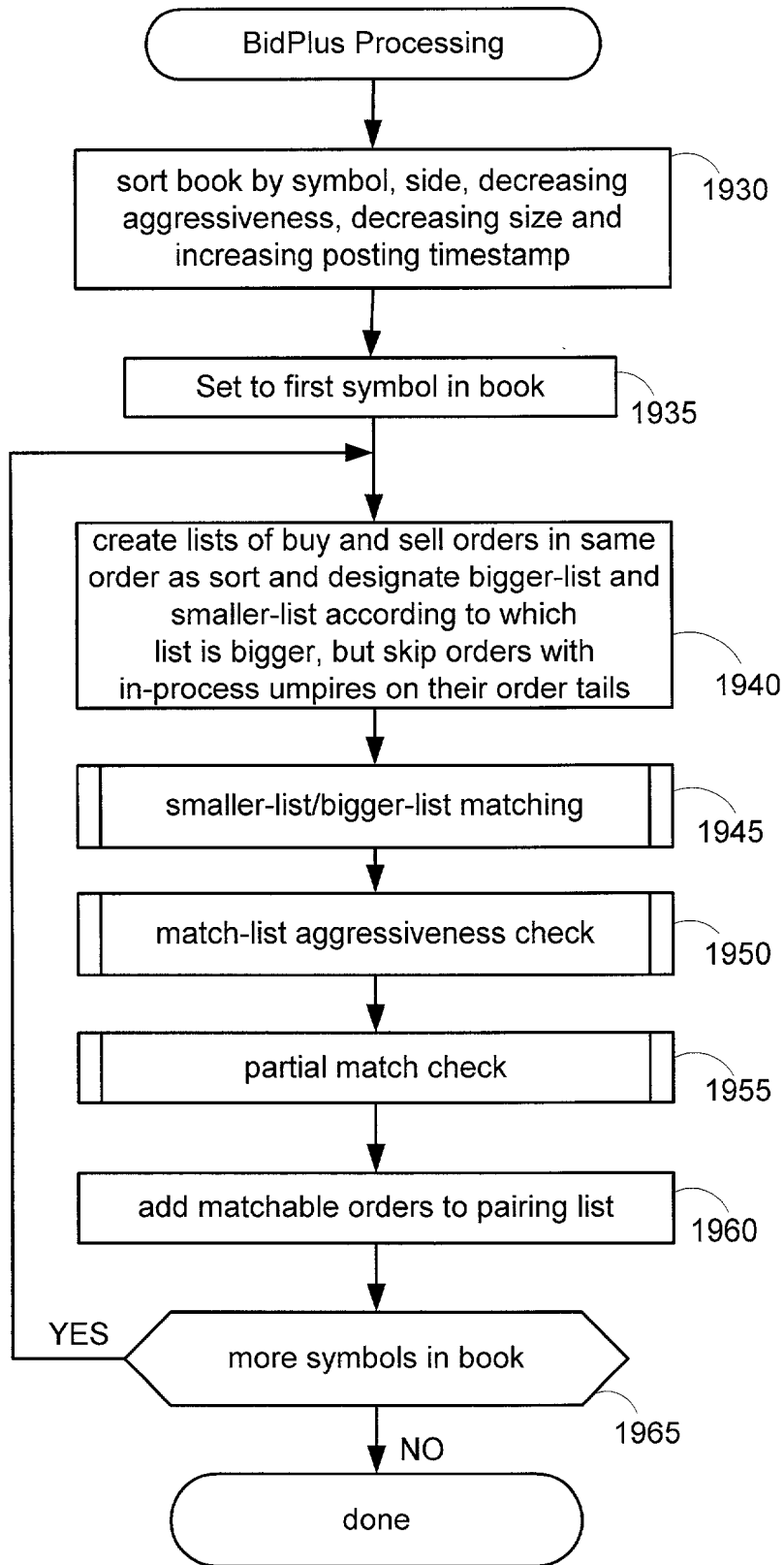


FIG. 88

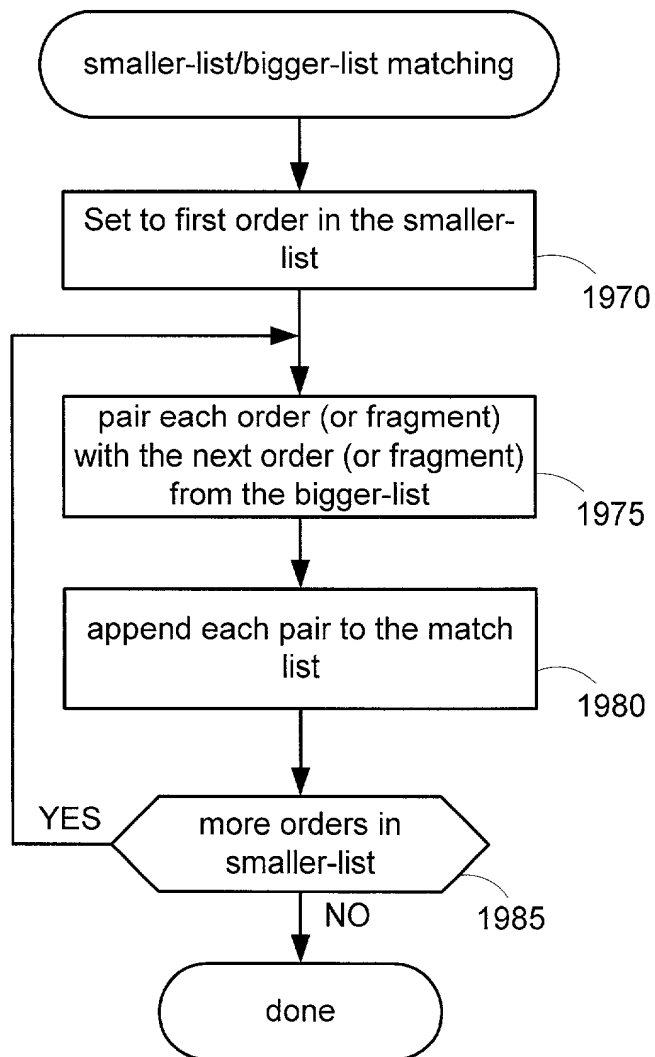


FIG. 89

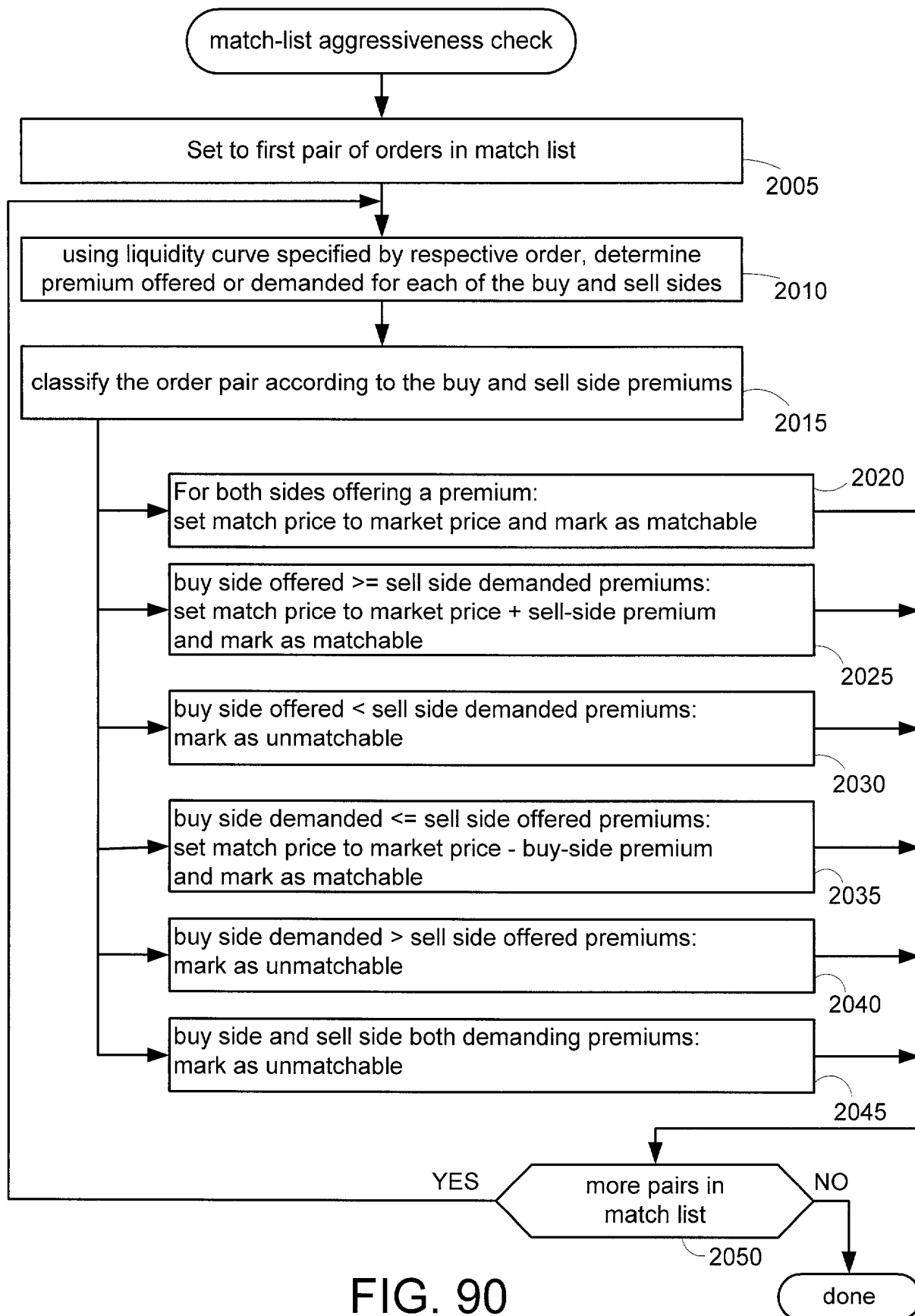


FIG. 90

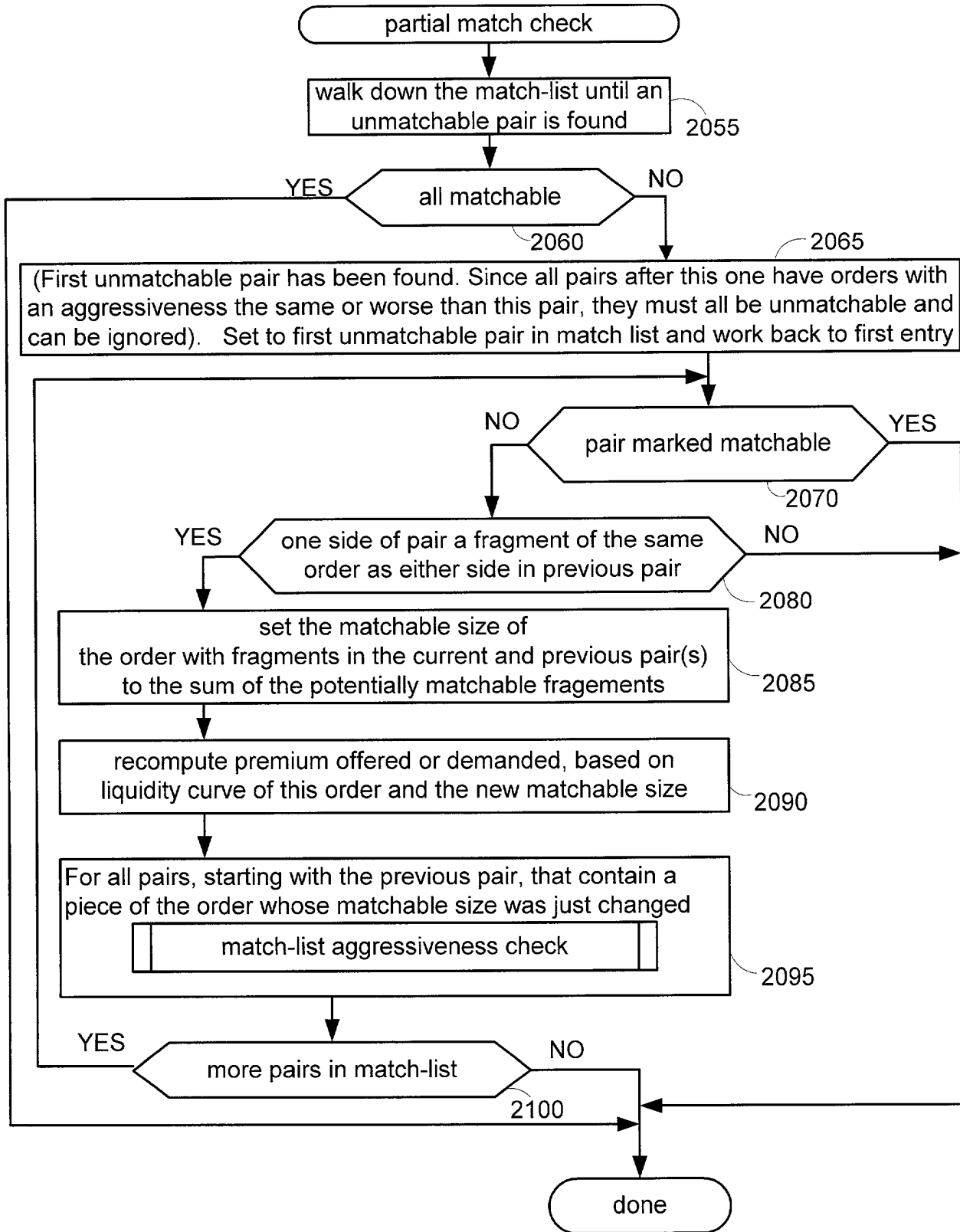


FIG. 91

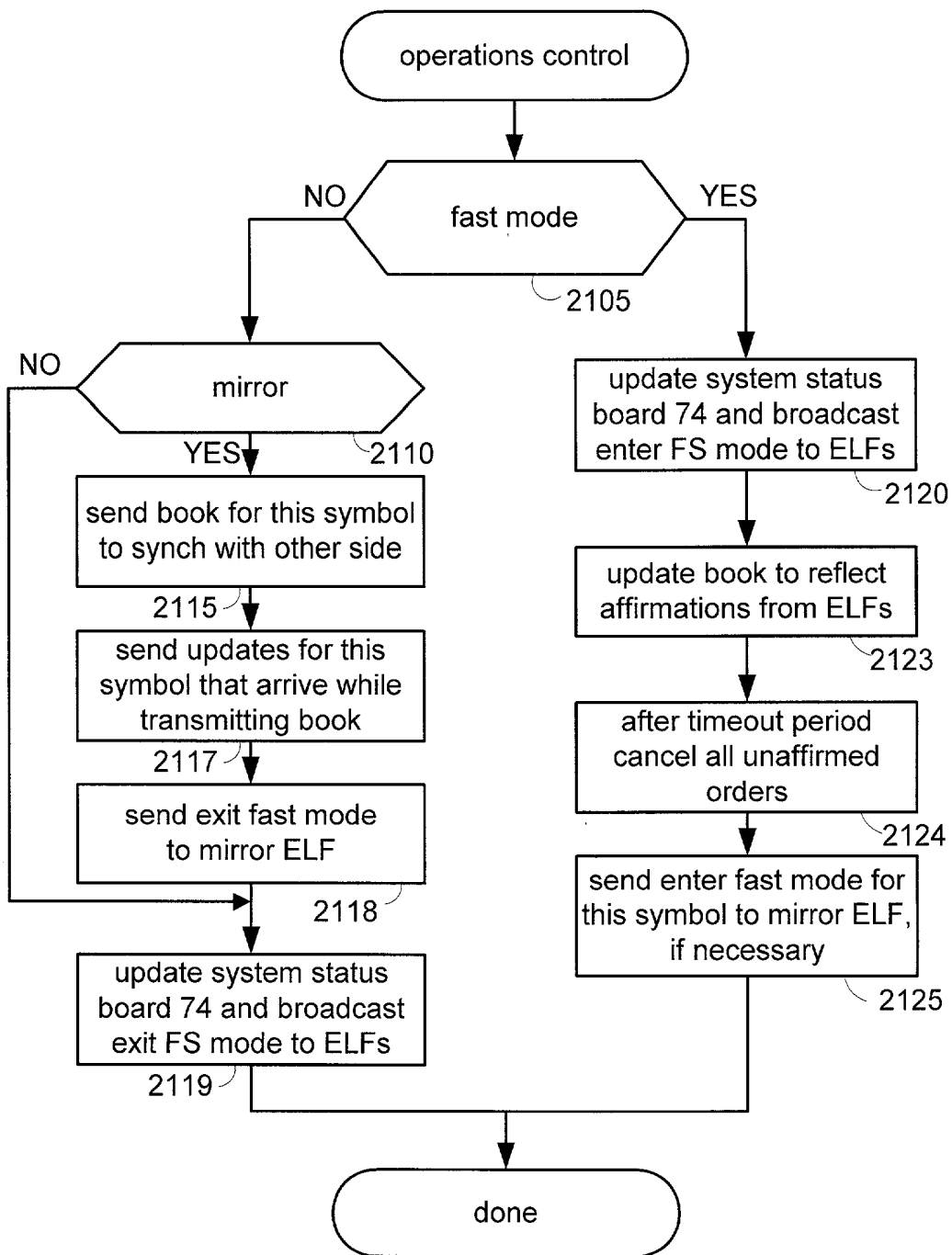
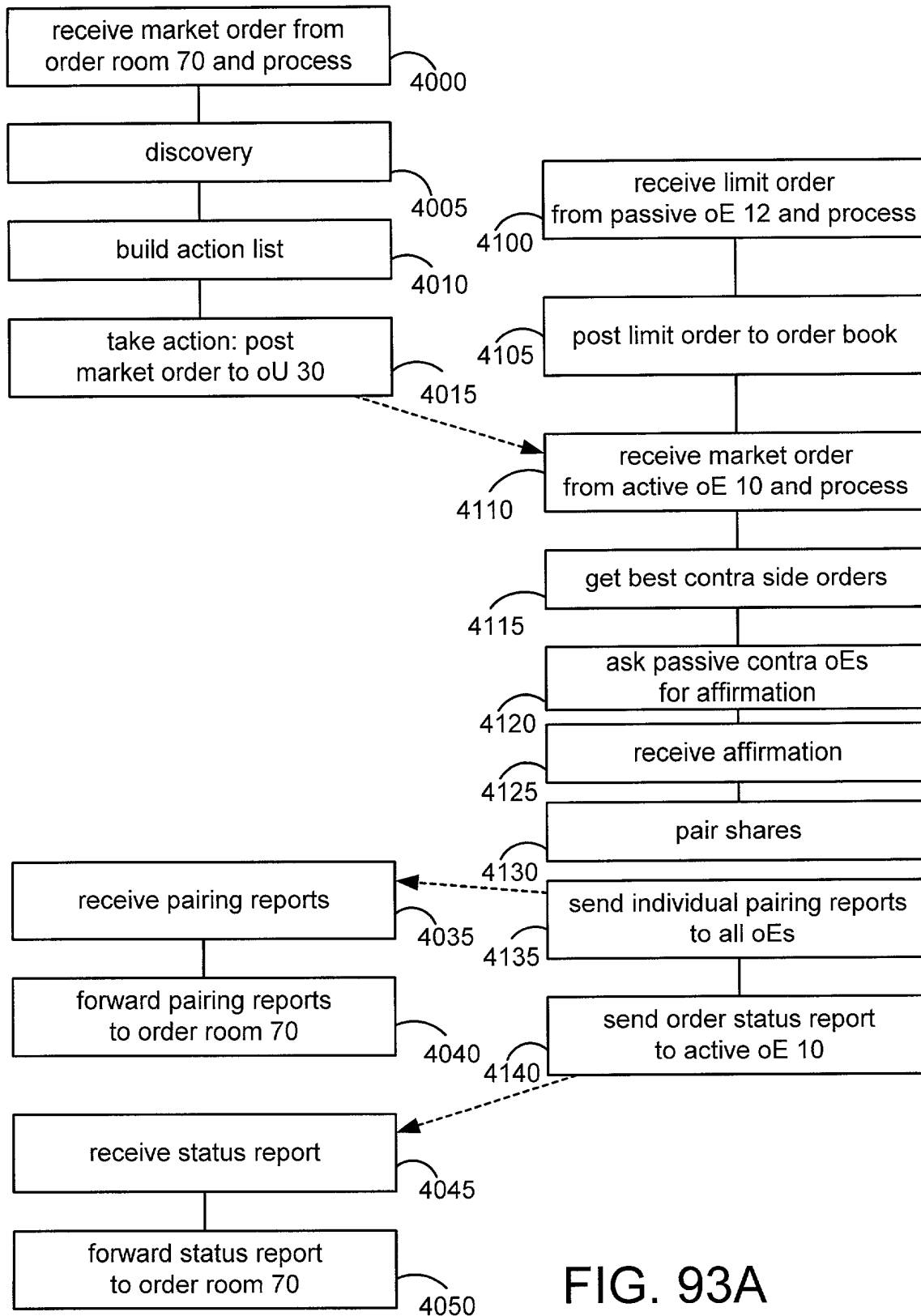
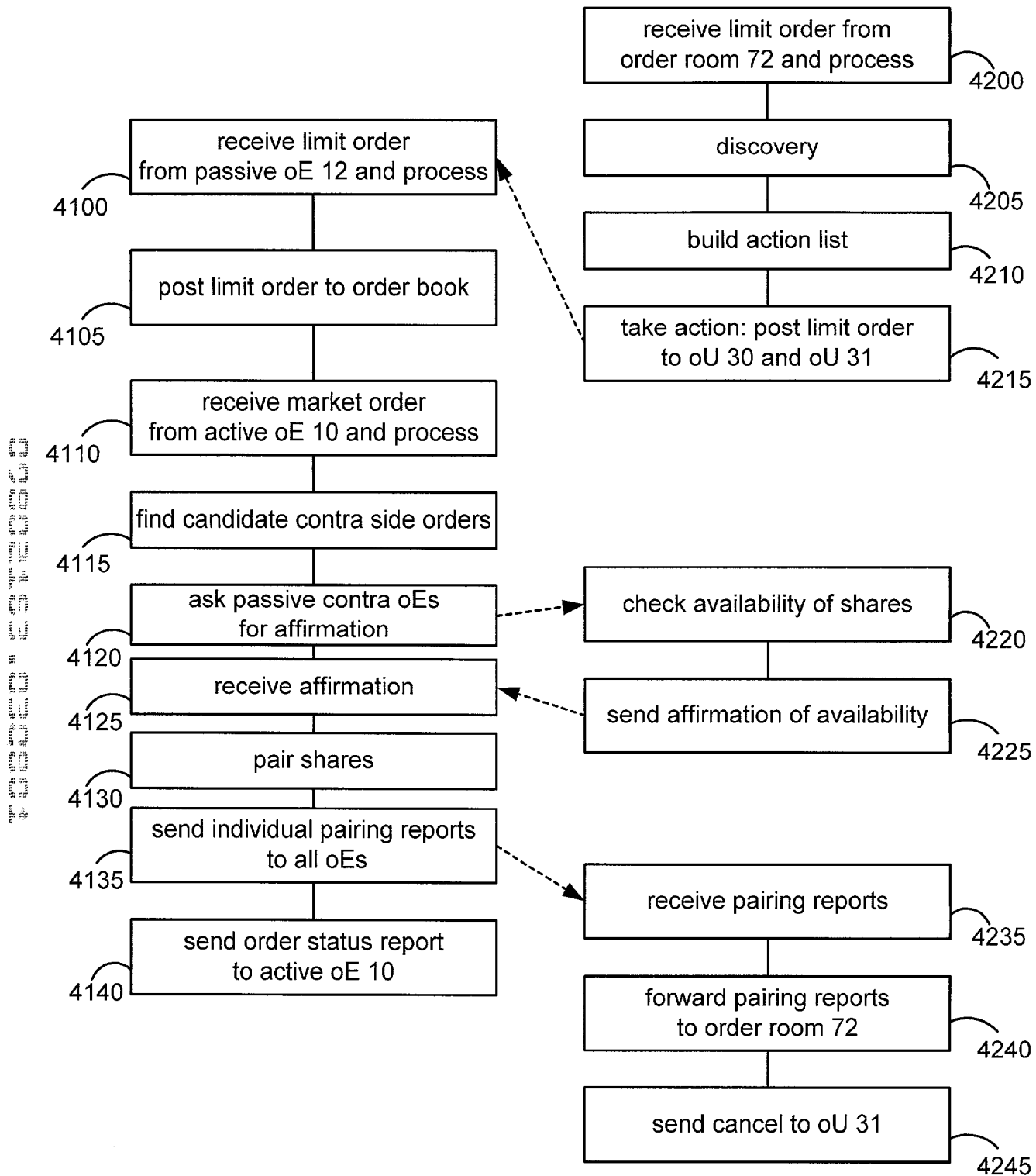
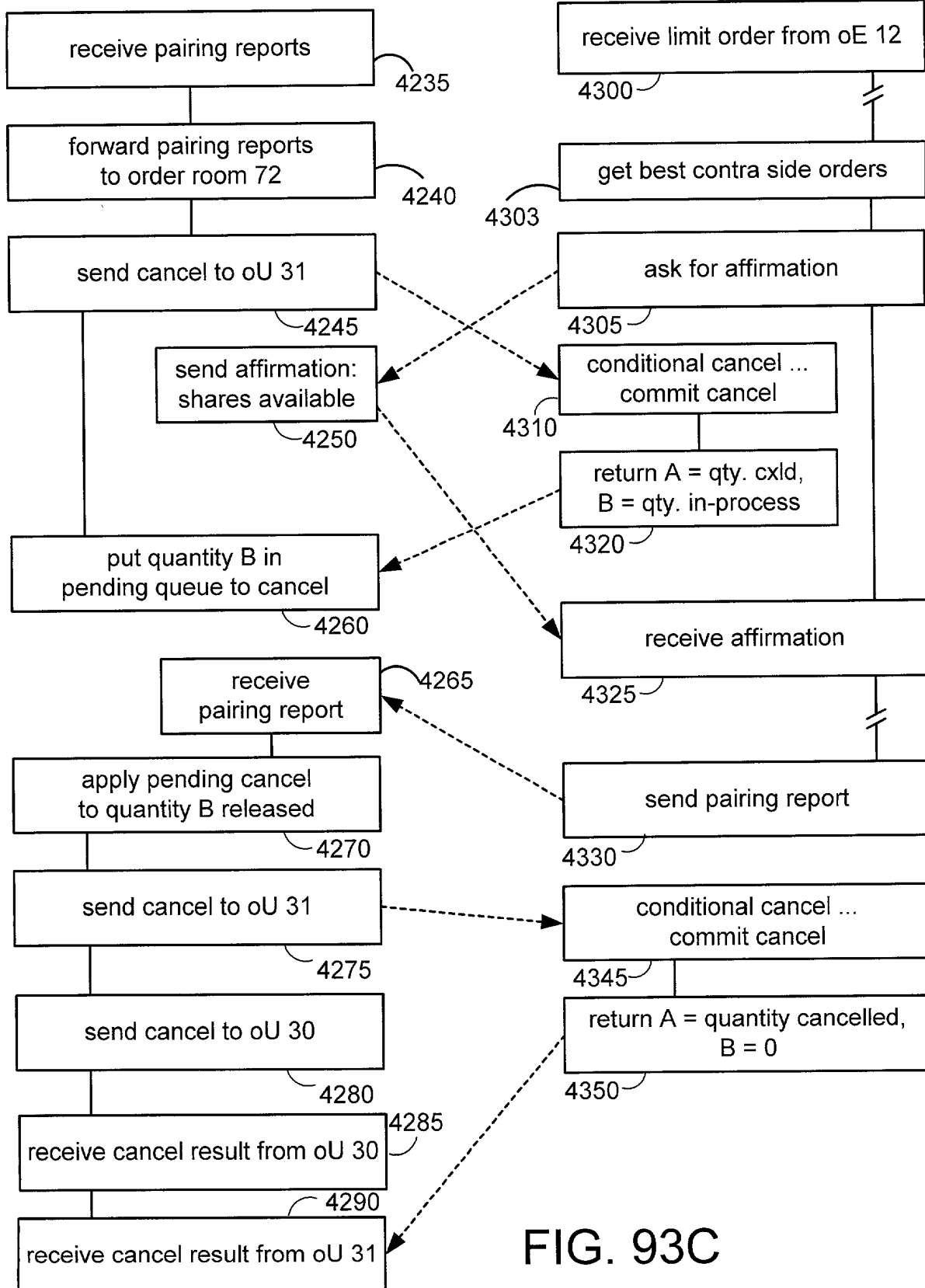


FIG. 92

**order ELF 10****order umpire 30****FIG. 93A**

**order umpire 30****order ELF 12****FIG. 93B**



**order ELF 12****order umpire 31****FIG. 93C**

oU 31

mE 51

oU 32

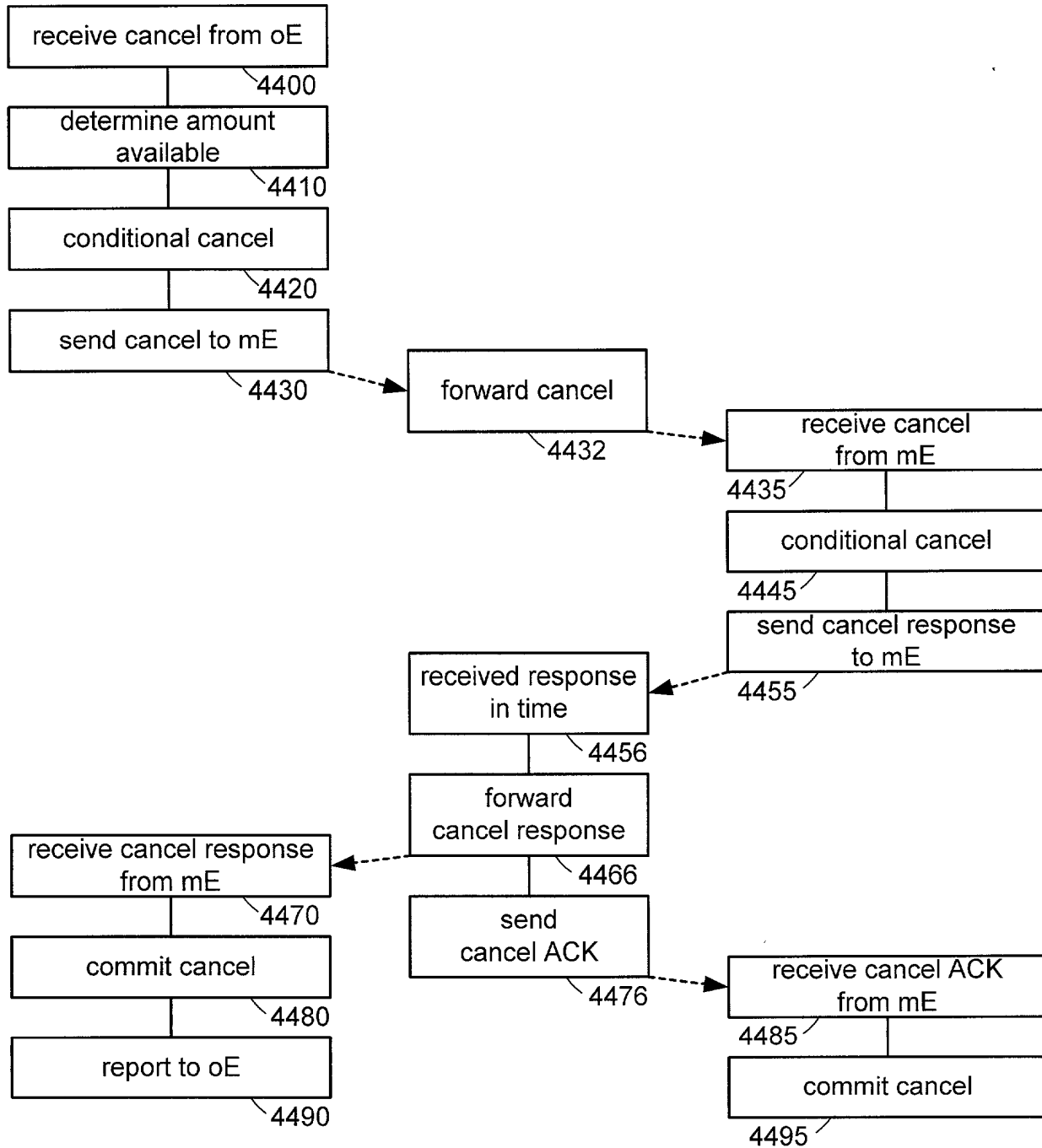
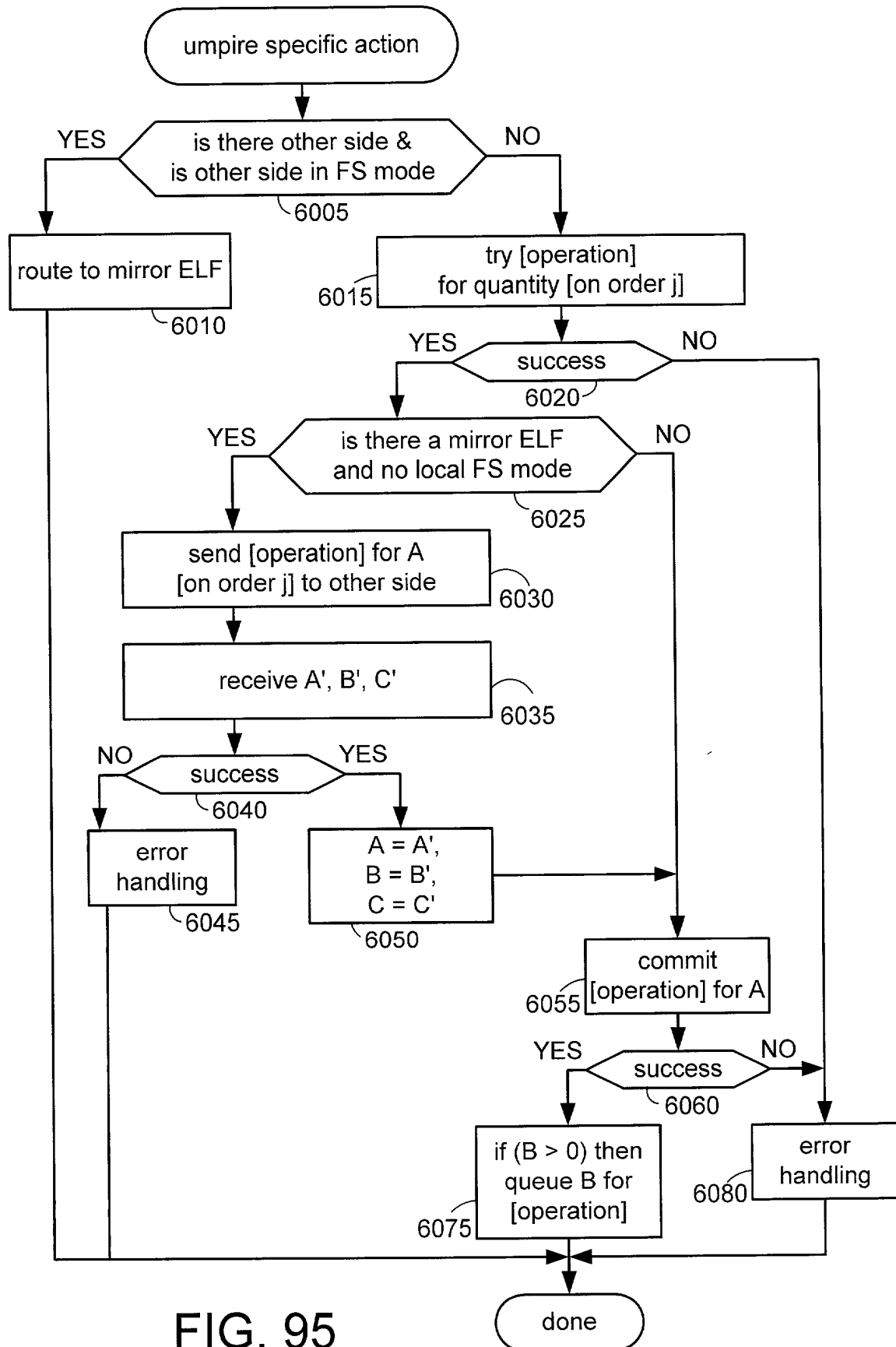


FIG. 94



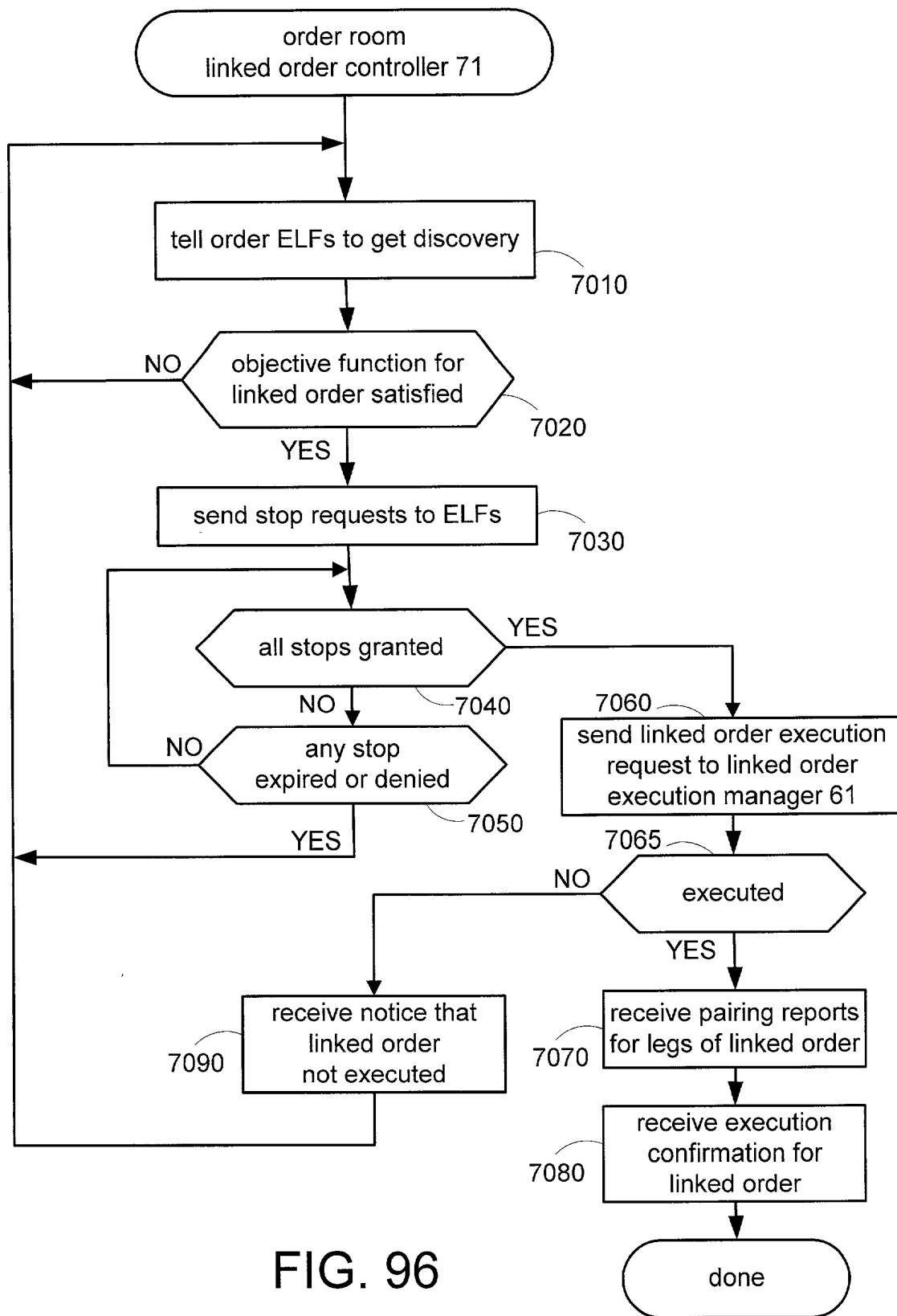
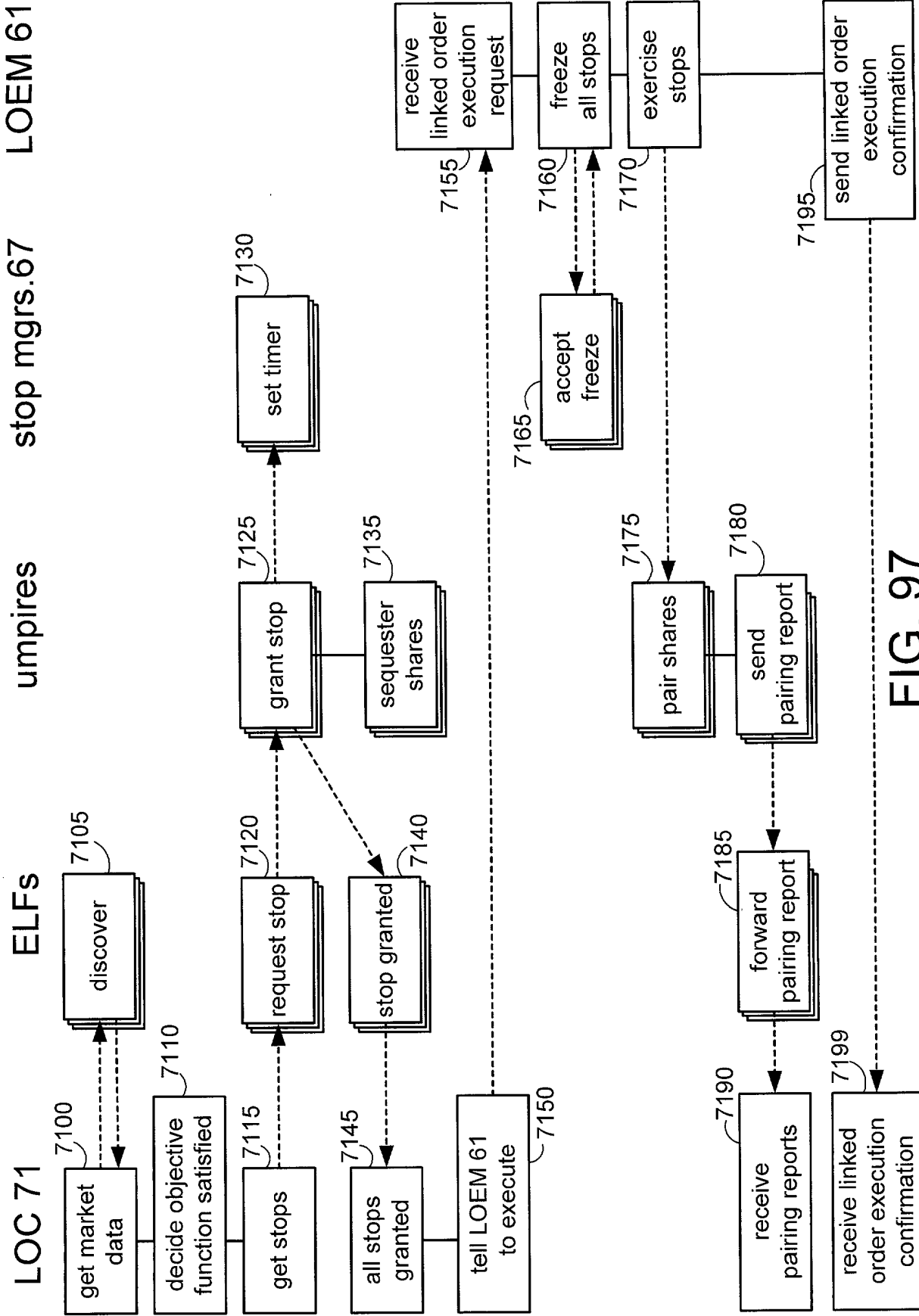
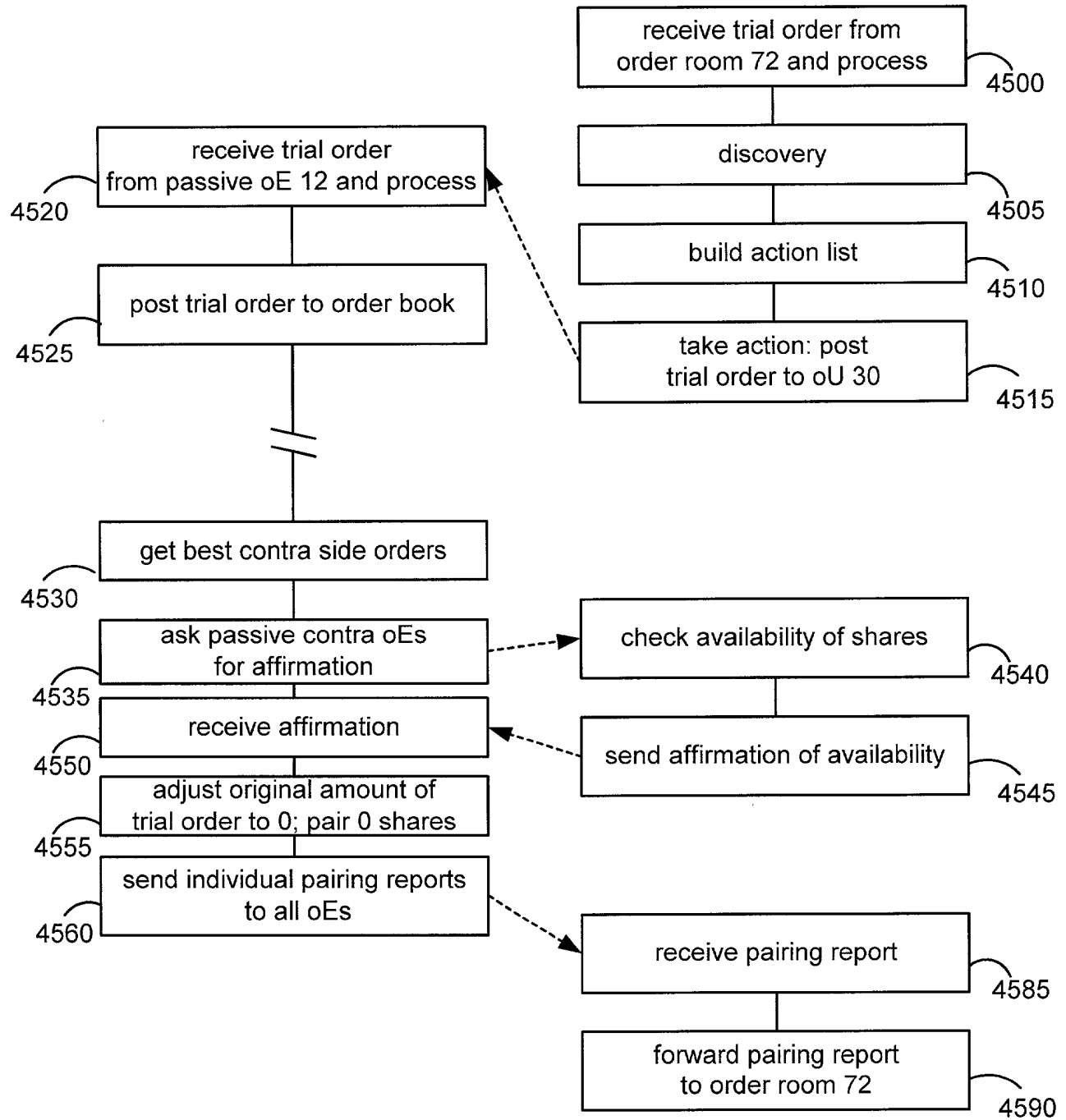


FIG. 96



**order umpire 30****order ELF 12****FIG. 98**

oE 10

oU 30

oE 12

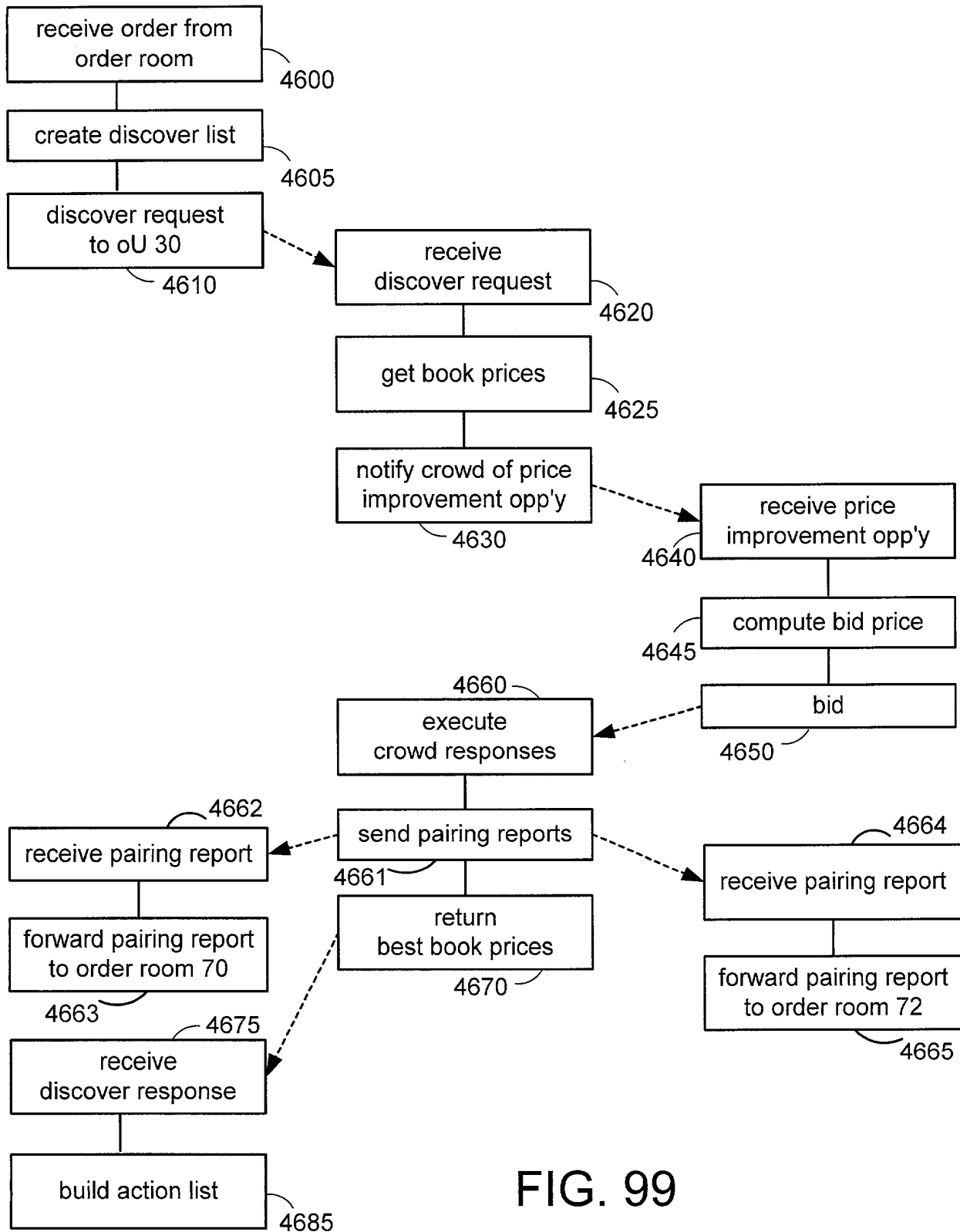
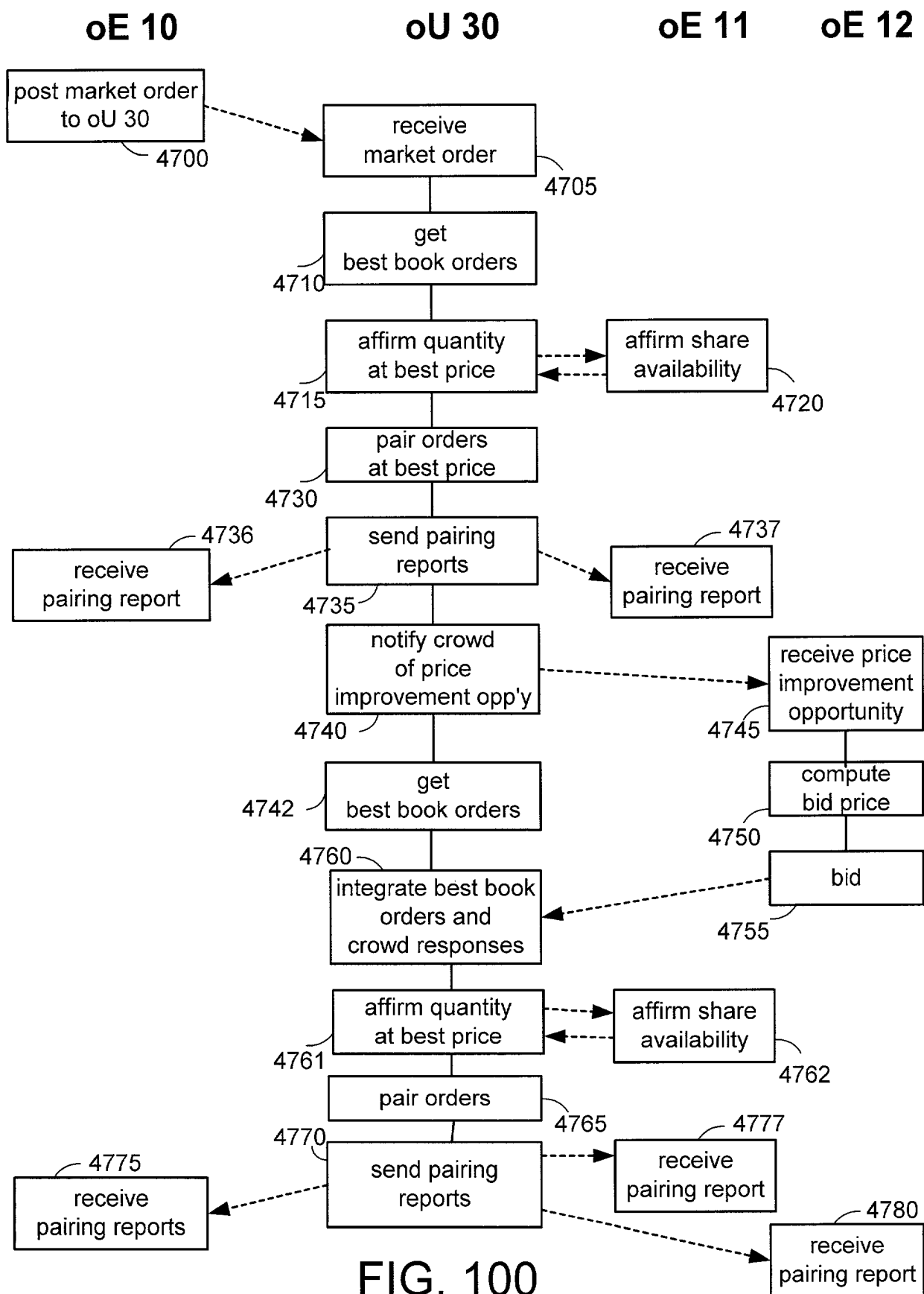


FIG. 99





oE 10

oU 30

oE 12

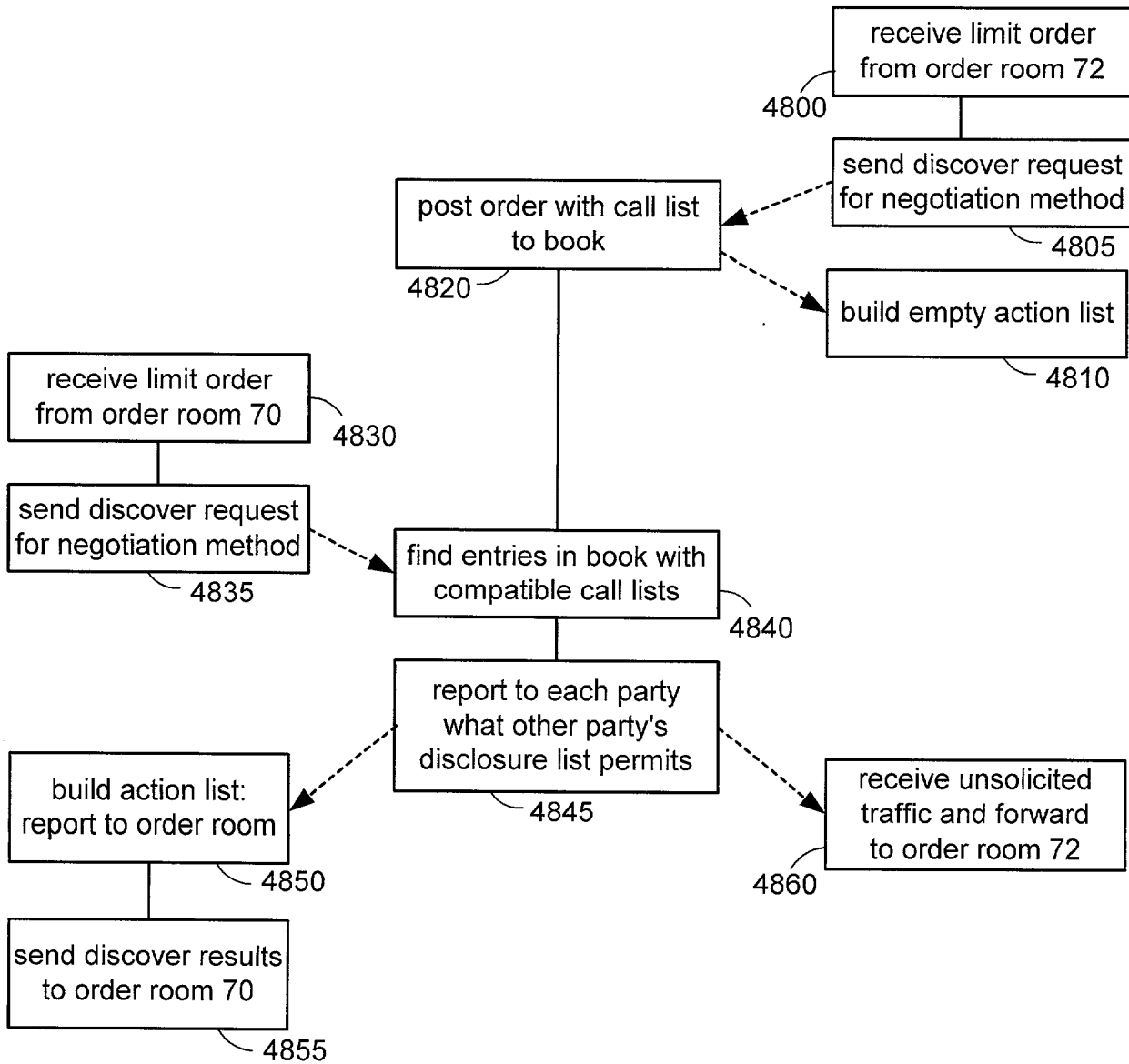


FIG. 101

oE 10

oU 30

oE 12

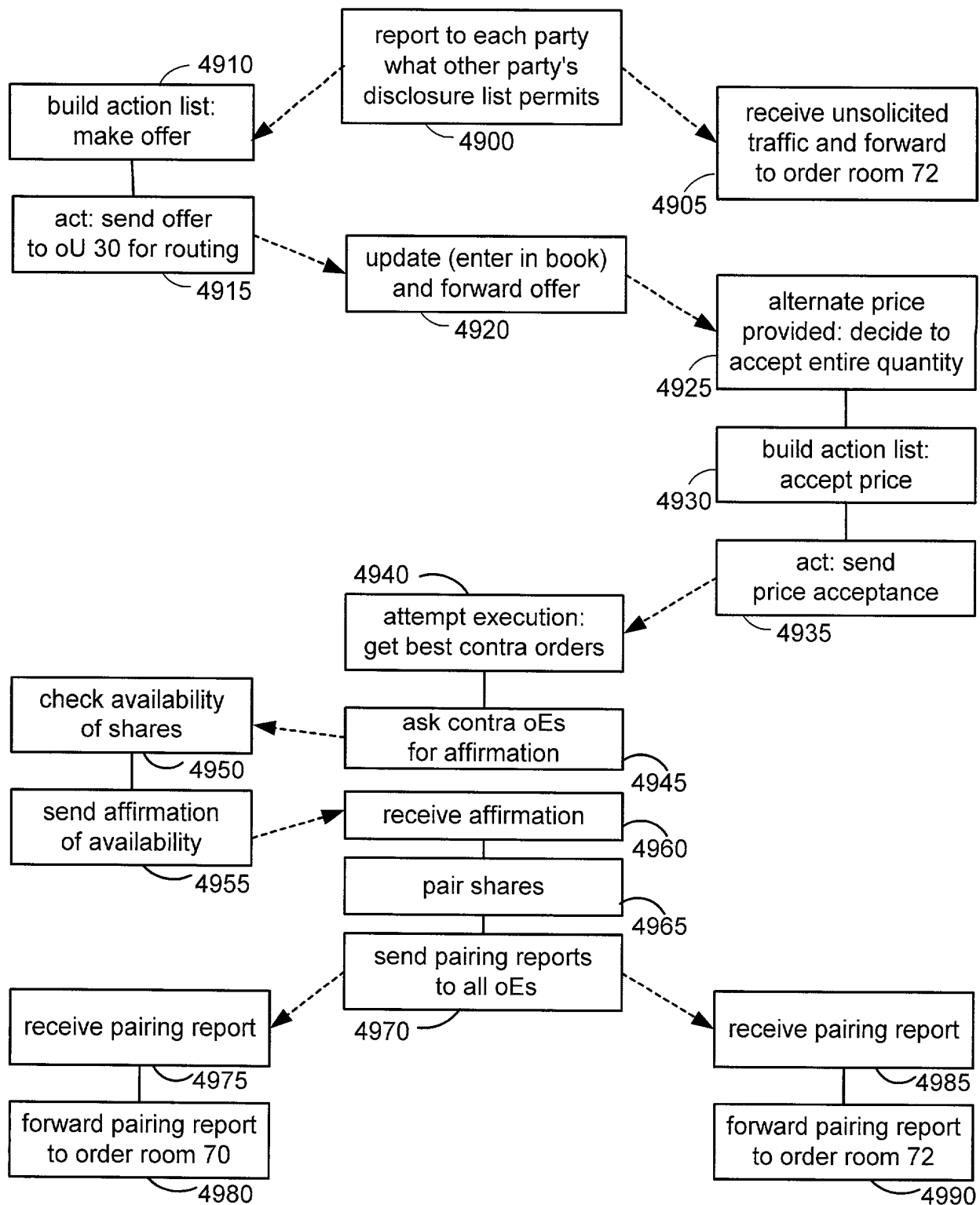


FIG. 102

oE 10

oU 30

stop order mgr 67

FIG. 103 is a sequence diagram illustrating the process of handling a stop order request and its expiration. The diagram involves three entities: oE 10, oU 30, and stop order mgr 67. The process begins with oE 10 receiving a stop order from order room 70 (5400) and deciding to request a stop from oU 30 (5405). oE 10 then requests a stop (5410). oU 30 receives the stop request (5415) and ensures the stop is allowed (5420). oU 30 then gets a stop expiration timer (5425) and sequesters the resource (5430). oU 30 tells oE 10 that the stop is granted (5435). oE 10 receives a stop granted notice (5450) and reports the stop granted to order room 70 (5455). oE 10 then receives a stop exercise from order room 70 (5460) and forwards the stop exercise (5465). oU 30 receives the stop exercise (5470) and pairs the sequestered resource (5475). oU 30 then sends pairing reports (5480). oE 10 receives a pairing report (5485) and forwards the pairing report to order room 70 (5490). oE 10 then receives a stop expiration notice (5499). oU 30 receives a stop expiration notice (5497) and sends stop expiration notices (5495). stop order mgr 67 receives a stop expiration timer request (5440) and sets the timer (5445). stop order mgr 67 then sends stop expiration notices (5495) to oU 30.

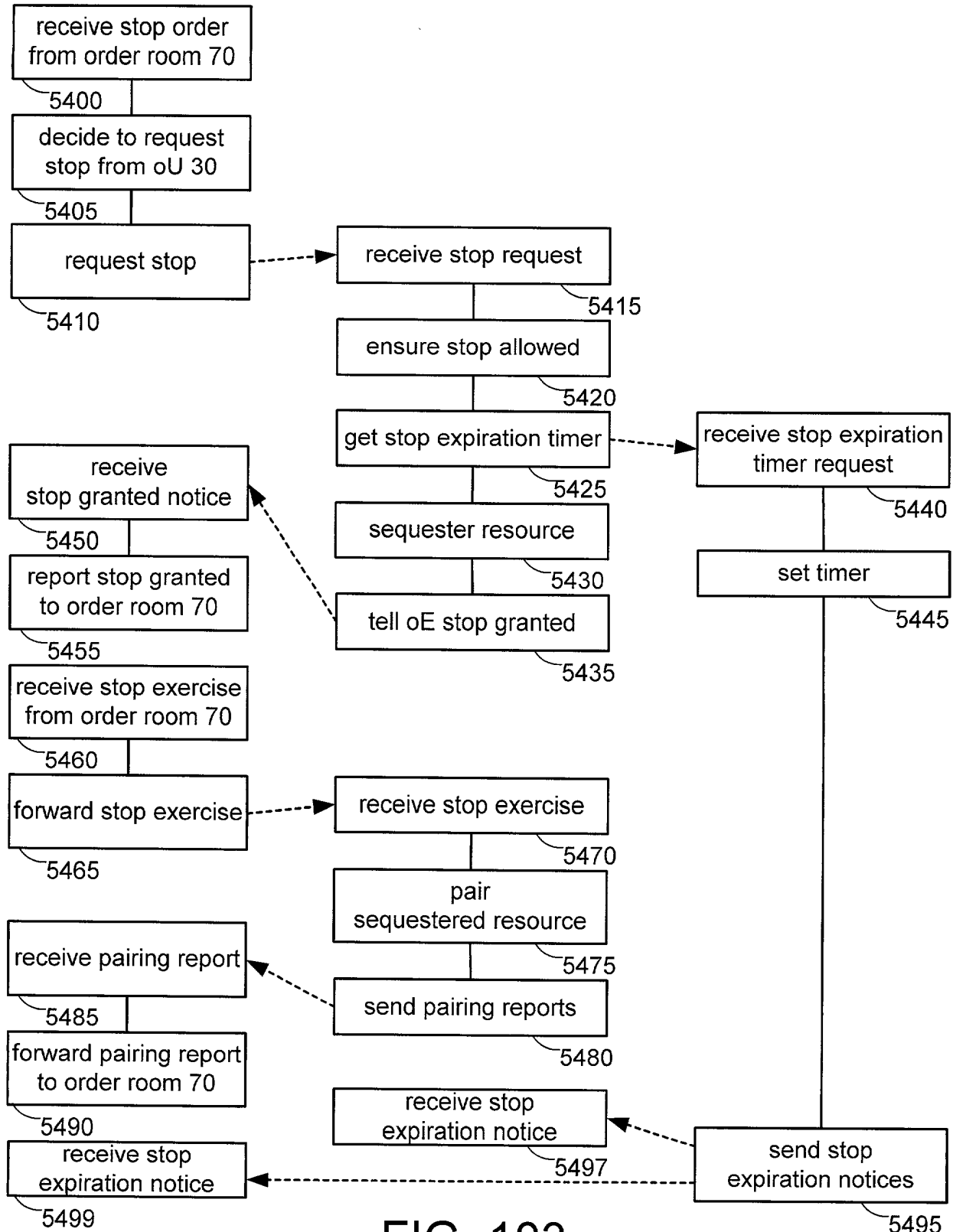


FIG. 103